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**CALUMET CONTAINER
LAKE COUNTY
HAMMOND, INDIANA
SITE ASSESSMENT REPORT**

April 2002

Prepared For:

U.S. Environmental Protection Agency
Emergency and Remedial Response Branch
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

**CALUMET CONTAINER
LAKE COUNTY
HAMMOND, INDIANA
SITE ASSESSMENT REPORT**

April 2002

Prepared By:  Date: 4/10/02
Sarah L. Meyer
Associate Project Scientist

Prepared and
Approved By:  Date: 4/10/02
Richard H. Mehl, Jr.
Project Manager

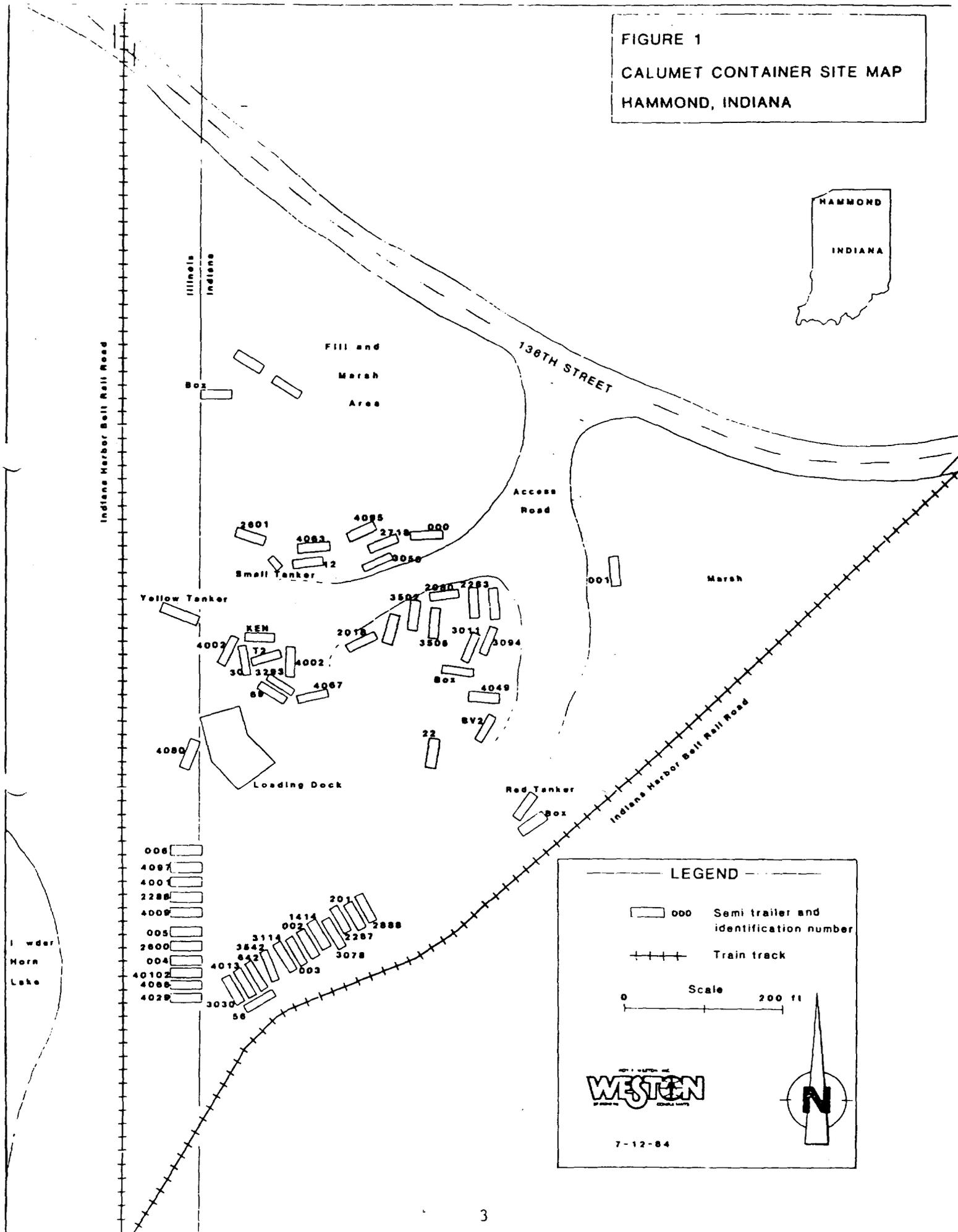
Approved By:  Date: 4/10/02
Dean F. Geers
Program Manager

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FIGURE 1
CALUMET CONTAINER SITE MAP
HAMMOND, INDIANA



LEGEND

- 000 Semi trailer and identification number
- ++++ Train track

Scale 0 200 ft

WESTERN

7-12-84



Roy F. Weston, Inc.
Suite 270
2125 University Park Drive
Okemos, Michigan 48864-3974
517-349-8255 • Fax 517-349-0798

10 April 2002

Ms. Verneta Simon
On Scene Coordinator
U.S. Environmental Protection Agency
77 West Jackson Boulevard, SE5J
Chicago, Illinois 60604

TDD No.: 0202-001

Subject: Calumet Container Site
Site Assessment Report, Revision I

Dear Ms. Simon:

Roy F. Weston, Inc. (WESTON®) is pleased to submit eight copies of the Site Assessment Report, Revision 1, for the Calumet Container Site in Hammond, Indiana.

Should you have any questions or require additional information, please feel free to contact us.

Very truly yours,

ROY F. WESTON, INC.

Richard H. Mehl, Jr.
Site Manager

cc: Lorraine Kosik, START Project Officer, U.S. EPA, Region V(SE-5J)

I:\WOSTART\31376-CC-LTR.WPD

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- B. Drum Log
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LIST OF ABBREVIATIONS AND ACRONYMS

CFR	Code of Federal Regulations
°F	degrees Fahrenheit
in. bgs	inches below ground surface
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
OSC	On-Scene Coordinator
PCBs	polychlorinated biphenyl compounds
PPE	personal protective equipment
ppm	parts per million
PRGs	Preliminary Remediation Goals
RCRA	Resource Conservation Recovery Act
RISC	Risk Integrated System of Closure
START	Superfund Technical Assessment and Response Team
STL	Severn Trent Laboratories
SVOCs	semivolatile organic compounds
TAL	Target Analyte List
TCLP	Toxicity Characteristics Leaching Procedure
TDD	Technical Document Directive
ug/kg	micrograms per kilogram
U.S. EPA	United States Environmental Protection Agency
VOCs	volatile organic compounds
WESTON	Roy F. Weston, Inc.
XRF	X-Ray Fluorescence

SECTION 1

INTRODUCTION

On 20 February 2002, United States Environmental Protection Agency (U.S. EPA) On-Scene Coordinator (OSC) Verneta Simon and the Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) initiated a Site Assessment at the Calumet Container site located in Hammond, Lake County, Indiana. The site assessment activities were conducted under Technical Document Directive (TDD) S05-0202-001. The analysis of the samples collected during the site assessment was under TDD S05-0202-002.

1.1 OBJECTIVES AND SCOPE OF SITE ASSESSMENT

The objective of this site assessment was to gather information to characterize the current state of the site with regards to soil contamination and the presence of unknown substances at the site and to evaluate the need for further investigation or removal action. Specific objectives of the site assessment are as follows:

- Determine the nature of soil contamination on the site.
- Determine the nature of the contents of 14 drums on site.
- Determine the potential threats to human health and the environment.
- Evaluate the need for further site characterization, remediation or removal.

To accomplish these objectives, the site assessment activities consisted of screening soil for lead content with x-ray fluorescence (XRF), collecting soil and drum samples from the site and

selectively analyzing the samples for organic and inorganic parameters and characteristics of hazardous waste.

1.2 REPORT ORGANIZATION

This site assessment report is organized into the following sections.

- Introduction -- The introduction provides a brief description of the objective and scope of the site assessment activities.
- Site Background -- The site background section provides the site description, site history, and a summary of previous investigations.
- Environmental Investigation Procedures -- The environmental investigation procedures section describes the methods and procedures used during the site assessment activities.
- Environmental Investigation Results -- The environmental investigation results section describes the results of sample analysis.
- Threats to Human Health and the Environment -- The threats to human health and the environment section identifies conditions under the National Oil and Hazardous Substances Contingency Plan (NCP) that warrant a removal action.
- Conclusions and Recommendations -- The conclusions and recommendations summarize the findings of the site assessment activities and provides recommendations for further activities.
- References -- The reference section provides a list of references utilized in compiling the report.

SECTION 2

SITE BACKGROUND

2.1 SITE DESCRIPTION

The Calumet Container site is located 3631 State Line Avenue in Hammond, Lake County, Indiana. The geographic coordinates of the site are 41° 38' 57" north latitude and 87° 31' 25" west longitude at an altitude of 476 feet above sea level. Approximately 90 percent of the 11-acre, triangular-shaped site is located in Lake County, Indiana and the remaining 10 percent is located in Cook County, Illinois (Figure 2-1). The site is bounded to the north by 136th Street, and in all other directions by the active Indiana Harbor Belt Railway. A chain-link and barbed-wire fence surrounds the site, with a break in the fence along the west side of the property and a hole in the fence at the east end of the property. Other key features on site include patches of dense, ground-cover vegetation and mature trees, an old building foundation, three abandoned tanker trucks and drums and overgrown piles of miscellaneous debris.

Both industrial- and residential-use land surrounds the site and within 1/4 mile of the site boundary are recreational-use bodies of water. A mobile home park is located directly adjacent to the site to the east and another is across 136th Street to the northwest. A small pond and wetland are situated in the northeast corner of the property and across 136th Street to the north is Wolf Lake, an interstate fishing and recreational lake (Figure 2-2). Beyond the rail line to the southwest is Powderhorn Lake and the Burnham Woods forest preserve. Lake Michigan is located less than 3 miles to the northeast of the site.

Two studies have been done to evaluate ground- and surface-water flow patterns in the area of the site (Wapora, 1979 and Soil Testing Services, 1980). Both studies concluded that groundwater tends to flow in a northeast direction from the site. Intermittent ponded surface water at the site has been documented in historic site photographs and records. The movement of surface water off the site

is not easily characterized; however, there may be a potential for surface water to flow off site towards nearby Wolf Lake, Powderhorn Lake, or a small stream to the northeast of the site that feeds Wolf Lake. In the past, recreational use of Wolf Lake has been impaired by, among other things, direct or indirect industrial discharges to the lake (U.S. EPA, 1981). A third study of site hydrogeology indicated that the water table is 3-4 feet below the ground surface (bgs)(King, 1979).

Soil types vary on site and adjacent properties. The unconsolidated layer of soil above bedrock in the area of the site is 90-100 feet thick and composed of 15-20 feet of beach and shoreline deposits interbedded with fine gravel, silt and clay over silty, sandy, clay till. It has been noted that the accumulation of oil and paint solids on the site may have acted to seal the soil surface in some areas and not allow percolation of surface water into the ground at those locations (King, 1979). A well log for an installation in the Burnham Woods forest preserve adjacent to Powder Horn Lake, southwest of the site, revealed that the upper 44-feet of soil is clay, followed by 118-feet of shale (Pankanin, 1982). The railroad grade along the eastern edge of the site is composed of fill material, slag, cinders, sand and gravel (King, 1979). North of the site, at the southern end of Wolf Lake are small areas of significant wetlands, classified as Type 4 Deep Marsh (U.S. EPA, 1981).

Service utilities were noted on the site property (Figure 2-2). An overhead electrical power line enters the property from 136th Street near the gate and terminates on the site at a control box that is mounted on a pole approximately 150 feet south of the gate. There is a buried West Shore petroleum pipeline on the site that runs east to west across the property under a cleared right-of-way; a buried Praxair Nitrogen pipeline also crosses the site. A geophysical report prepared for the Indiana Department of Environmental Management (IDEM) in 1986 indicated the presence of markers or breather pipes for Badger, Marathon, Amoco and Union Carbide pipelines on the site property (Bartlett and Ursic, 1986). According to the U.S. EPA files, there are no drinking water wells in the area that can be threatened by groundwater contamination in the area (Pankanin, 1982).

2.2. SITE HISTORY

The Steel Container Corporation, also known as the Calumet Container Corporation, began operations in the 1960's and was owned and operated by Mr. John Jagiella. Operations at the site included drum and pail reconditioning (5- to 55- gallon) and fiber drum processing. Most of the containers that were serviced were used in the paint and graphic arts industries. In July 1981, Mr. Jagiella filed for bankruptcy in Chapter 11 Federal Bankruptcy Court. The Lake County Commissioners currently own the bulk of the Calumet Container site that is located in Indiana. A small parcel of land in the northwest corner of the site is privately owned by Mr. George Holmes.

During the period that the Calumet Container Corporation facility was in operation, the company was cited with numerous environmental violations regarding air and water contamination and material disposal. In 1980, the Illinois State Attorney General began an investigation to evaluate the movement of groundwater from the site into Illinois (Bitter, 1984). It was determined that groundwater in the area of the site contained elevated levels of organic compounds, including phenolics, toluene, xylene, and PCBs, and heavy metals and that the groundwater had the potential to migrate into Illinois-owned soils and nearby Wolf Lake (Soil Testing Services, 1980). The State of Indiana Stream Pollution Control Board ordered Mr. Jagiella to clean up spilled residues on the site and the owner was eventually issued a Final Order by the State of Indiana. Subsequent property inspections following the Final Order yielded violations of that Order and on 16 April 1982, the State of Indiana Attorney General filed an Enforcement Action against Calumet Container Corporation (Bitter, 1984).

Five days after the State of Indiana Enforcement Action was filed, on 21 April 1982, an explosion and fire consumed the main building at the site and the U.S. EPA began a 14-day Immediate Removal Action on 7 May 1982. Thirty cubic yards of sludge and 5,500 gallons of contaminated liquid were removed from the site and disposed of at that time. Analysis of surface water runoff, contents of processing and holding tanks on site and soil at the loading dock area at the time

immediately following the fire indicated the presence of lead, chromium, cyanide, arsenic, phenolics, other organics, oil and grease. Following the fire, the U.S. EPA notified Mr. Jagiella and requested that he volunteer to clean up the site. Mr. Jagiella then attempted to organize a group of responsible parties to clean up the site, but failed to do so and as a result, the U.S. EPA initiated a cleanup (Madany and Bowden, 1982).

In accordance with section 104 (a) (1) CERCLA, a Planned Removal Action began at the site on 9 January 1984. U.S. EPA contractor Associated Chemical and Environmental Services of Oregon, Ohio, began a surface cleanup of containerized liquids, solids and sludges that were considered to be hazardous materials. A heavily contaminated area used as a loading dock during facility operation was completely dismantled and removed. Approximately 2-feet of soil was removed from underneath the loading dock and the area was backfilled and capped with 162 tons of clay. Other areas of the site that contained visibly stained soils were also excavated and backfilled with clay (Bitter, 1984).

Two tanker trucks on site were noted in a summary report of the Removal Action activities. One tanker, a yellow tanker located along the western perimeter of the site, contained sludge and liquid fractions that were sampled and determined to be approved for disposal in the City of Hammond sewer system. At the time of the removal action, most of the material inside the yellow tanker was frozen and was to be disposed of at some time after the cleanup when the weather was warmer and the material had thawed. In addition, the cleanup staff had patched a hole in the yellow tanker that had caused a leak and accumulation of oily material underneath the tanker. The second tanker on site noted in the summary report was a red tanker located at the eastern perimeter of the site. This tanker contained approximately 200-gallons of liquid that was sampled and removed from the site for disposal (Bitter, 1984). Additional records indicated that in 1993, a contractor (WESTON TAT) for the U.S. EPA resampled two tanker trucks on the site; one in the northwest part of the site and one in the southeast part of the site. No results from this sampling were located, but records

indicated that at the time of resampling, the northwest tanker contained a rust-colored liquid and the southeast tanker contained black liquid and black globules.

A total of five thousand gallons of liquid and 1,345 tons of soil, sludge and solidified waste were removed from the site and disposed. Following the Removal Action, the site was secured and access to the site was blocked. A fence was later installed to surround the entire property. It was then recommended that Mr. Jagiella remove all scrap material from the site and work with the City of Hammond to restore the land for use (Bitter, 1984). Currently, large mounds of scrap metal, drums and debris litter the site.

In 1986, a follow-up geophysical investigation was ordered by IDEM for the Calumet Container site. Electromagnetic induction and magnetometer surveys were conducted using a 50-foot grid and results indicated that there were two areas on the site where metallic masses were buried. Each mass was approximately 25-feet in diameter. One mass was identified in the far southern corner of the property; the other mass was identified in the eastern half of the property, approximately 100-feet south of the utility right-of-way (Bartlett and Ursic, 1986). No documentation was located regarding any further investigation of the buried masses. Composition of the masses appears to remain unknown.

Fifteen monitoring wells encased in steel protective casings with locking caps have been installed and remain on site (Figure 2-2). The well casings are labeled MW-5 through MW-15, MW-17 through MW-19, MW-22, MW-23 and one casing has an illegible marking on it. According to IDEM, the wells were installed by Hydrosience, a contractor for IDEM. IDEM reports that installation of these wells began some time in 1987 (Ryan Groves, personal communication, 2002).

Vandalism and trespassing have been issues at the site since the cleanup. In 1996, approximately 1,000-feet of fence was stolen from the site perimeter allowing unrestricted access to the site. During the same time period, contaminated soil had been removed from the site and used as fill at

residential properties in Hammond, IN. Currently, there are indications of frequent incidents of trespassing.

In 1996, a statement by the IDEM indicated that there were no real concerns remaining associated with the site, it had been secured with a fence and all drums and waste had been cleaned up at the time of the federal removal action (Bynum, 1996). IDEM staff investigated the site on 15 November 2001 in an effort to determine the status of the site and noted empty tanker trucks, drums of unknown contents and debris on the property. Soil samples were collected at that time and analytical results indicated that surface soil on the property contained lead in concentrations as high as 46,000 ppm in addition to elevated levels of cadmium, chromium and barium.

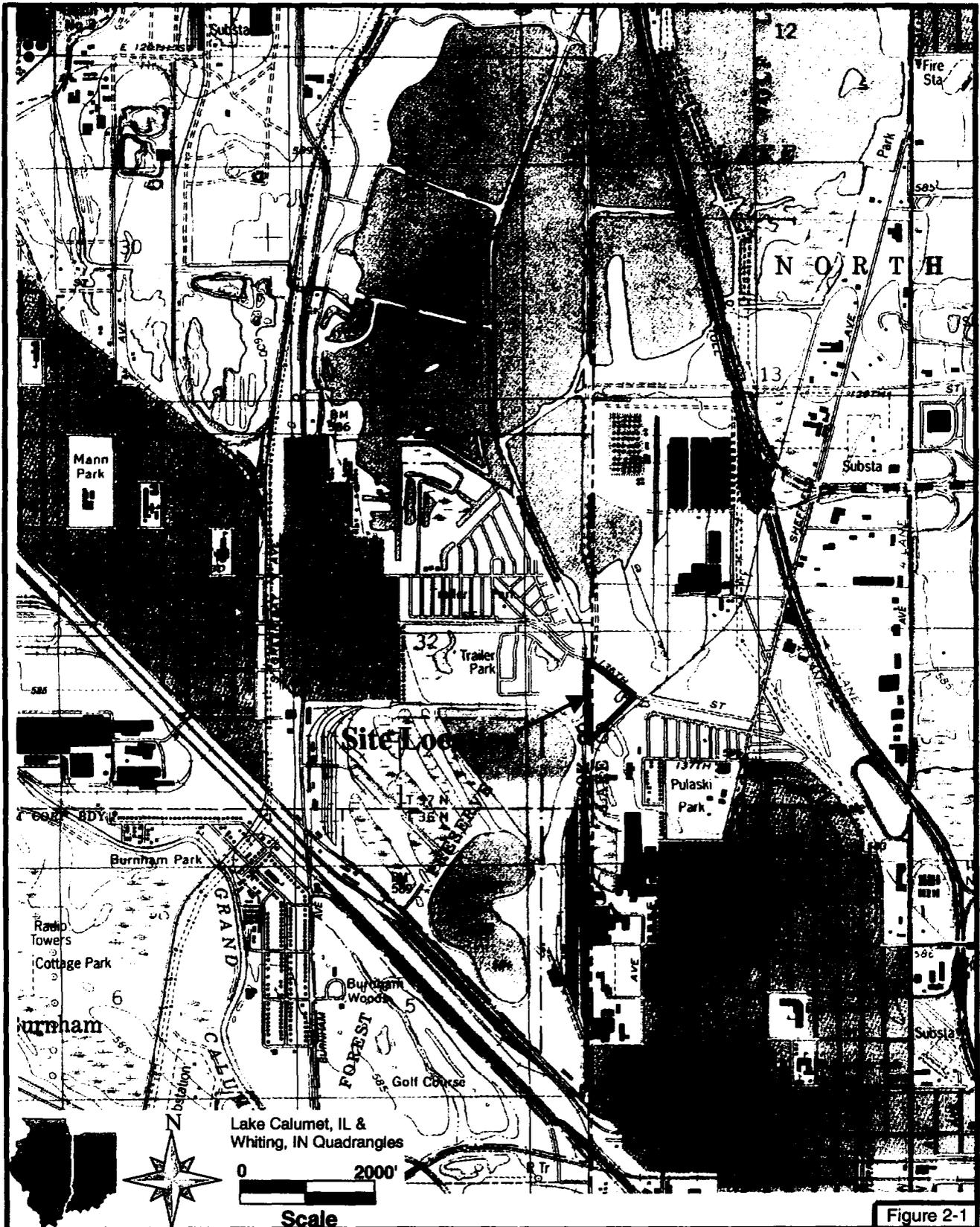
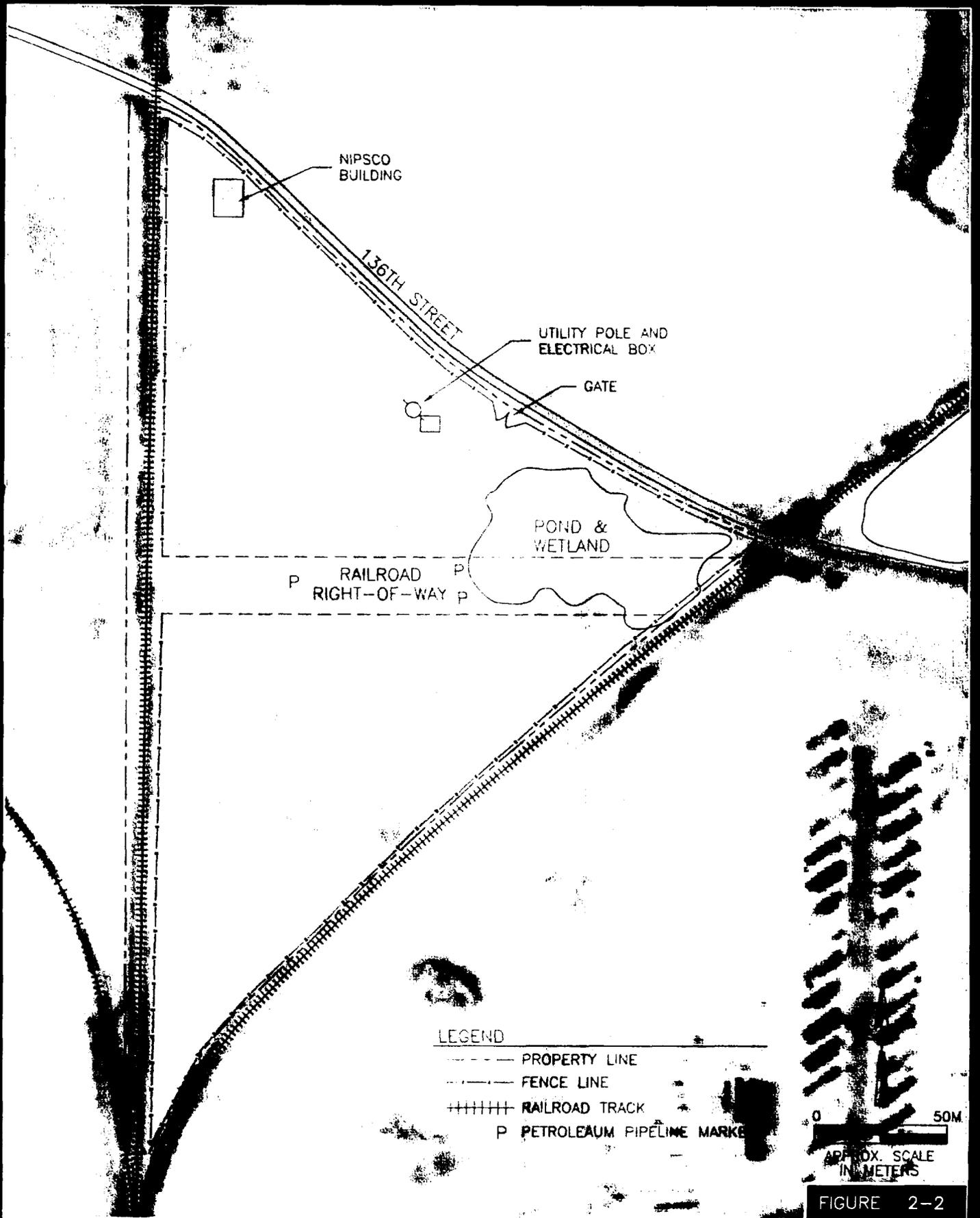


Figure 2-1



750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

TOPOGRAPHICAL SITE LOCATION MAP
CALUMET CONTAINER SITE
Hammond, Lake County, Indiana and Cook County, Illinois



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 MANAGERS DESIGNERS/CONSULTANTS

750 E. Bunker Ct.
 Suite 500
 Vernon Hills, Illinois
 60061

SITE MAP
 CALUMET CONTAINER SITE
 U.S. EPA
 Chicago, Illinois

SECTION 3

ENVIRONMENTAL INVESTIGATION PROCEDURES

On 20 February 2002, a site assessment of the Calumet Container property was conducted by WESTON START personnel to collect soil and drum samples as well as field data to establish if hazardous materials were present and determine if those materials posed a significant threat to human health or the environment. On-site personnel included OSC Verneta Simon (U.S. EPA) and Rick Mehl, Sarah Meyer, and Don Paxton (START). Specific site assessment observations and activities are detailed below.

3.1 SITE CONDITIONS

At the time of this investigation, access to the site was unrestricted. The chain-link and barbed-wire fence that surrounds the site had a locked gate on the north side, accessed by 136th Street. There was a break in the fence on the west side of the property against the railroad tracks that was approximately 50-feet wide. The fence break spanned the width of the right-of-way that passes through the property from east to west. Markers in the area indicate that there is a WestShore pipeline buried in the right-of-way. Evidence of recent trespassing included worn footpaths that cross the site, a fire ring surrounded by chairs and what appeared to be a pet grave with flowers and a flag adorning it. IDEM staff, that were present during the site assessment, stated that the grave markings were not there when they were on site in November 2001. Swans and ducks were seen on the property directly adjacent to the site, within 10-feet of the western site boundary. Photographs of the site are provided in Appendix A and site physical conditions are noted in Figure 3-1.

Approximately 150-feet south of the fence gate was a cluster of 14 drums. Five of the drums were labeled "Cal. Site Waste 5/88". One of the drums was turned upside down inside of a polyethylene overpack drum that was lying on its side and had no lid. All of the drums were rusted and many of

the lids were perforated with rust holes. One drum contained labeled sample jars; others contained used PPE and spoils from well installation. Drum sizes, conditions and contents are provided in Appendix B. IDEM staff on site indicated that the drums have been on site for a period of time longer than one year, while City of Hammond staff that were on site indicated that the drums have been there for an even longer period of time.

In addition to drums, the site was littered with large amounts of debris. Numerous deteriorated, rusted drums were scattered around the site, including one that appeared to have had a liner in it that was lying inside of a rusted plating vat. Other drums on the site were partially buried. Three tanker trucks were on the property; at least two of them appeared to contain unknown substances. Volatile Organic Compounds (VOCs) were detected with a MultiRAE multi-gas vapor analyzer at or inside hatch openings of these two tanker trucks. Obvious odors were also noted in the areas near the tankers. The tanker truck lying near the fence along the west side of the property was labeled "Kampo Transit, Inc., Neenah, WI", and appeared to be leaking an unknown liquid. Another tanker truck that was located against the fence in the southeastern portion of the site was labeled with the letters "MA_OY." Large piles of scrap metal, tires and automobile parts were seen on the site. Some debris was mounded over with soil or vegetation. An old building foundation was visible near the center of the site. Paint chips and residue in various colors were found in clumps located mostly in the southwest portion of the site.

3.2 SAMPLING ACTIVITIES

During the 20 February 2002 Site Assessment, START collected five investigative soil samples from five locations on the site. Two of the sampling locations were the same locations that had been sampled by IDEM in November 2001 that yielded results indicating elevated levels of lead, cadmium, chromium and barium. In addition, one drum that contained an unknown substance was sampled. START also used a Spectrace 9000 XRF unit to screen surface soils around the property for lead prior to collecting samples for laboratory analysis. The XRF screening locations are shown

in Figure 3-2. Sample collection locations are shown in Figure 3-3. Sample collection procedures are described below.

An XRF unit was used to determine areas of the site where the soil contained elevated lead concentrations and where soil samples would be collected for confirmatory laboratory analysis. Screening with the XRF device was performed at biased locations where there were bare areas of dark or stained soil, non-native soil or areas where contamination was evident (e.g. presence of paint chips or discolored soil). Screening results were recorded in the site logbook. Rainy and damp conditions on the day of the Site Assessment precluded extensive screening with the XRF device as the unit must remain dry during operation.

A total of five investigative surface soil samples and one drum sample were collected. A physical description of conditions at each sample location follows:

- CC-SS01: This sample was collected immediately southwest of the old building foundation. IDEM sampled this location in November 2001.
- CC-SS02: This sample was collected in the southwest portion of the site, near a cluster of sampling wells, a pile of crushed drum debris and visible paint chips and residue on the ground surface.
- CC-SS03: This sample was collected in the far southwestern corner of the site in an area with little or no vegetation and paint chips and residue on the ground surface. IDEM sampled this location in November 2001.
- CC-SS04: This sample was collected from beneath the red tanker truck near the western site boundary. This truck was leaking an unknown liquid onto the soil where the sample was taken and VOC vapors were detected inside the tank.
- CC-SS05: This sample was collected from beneath the smaller, yellow tanker truck in the northwest portion of the site. VOC vapors were detected inside the tank. A duplicate sample was collected here.

- **CC-WC14:** This sample was collected from a drum (CC-DM14) in the cluster near the north gate to the site. The unlabeled drum contained an unknown, viscous, lacquer-type substance.

Soil and drum samples were collected with disposable plastic scoops and placed into clear, wide-mouth, glass jars with Teflon-lined lids. A grab sample was first collected for VOCs and packed tightly in a 2-ounce jar. The remainder of the sample was then homogenized in a disposable, aluminum pan before being placed into sample containers. Sterile nitrile gloves were donned before the first sample was collected and changed before each subsequent sample. Soil samples were collected from approximately 0 to 3 inches below ground surface (in. bgs).

All soil samples were analyzed for Target Analyte List (TAL) Metals. Samples CC-SS01, CC-SS02, CC-SS04, CC-SS05 and CC-WC14 were also analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyl compounds (PCBs). Samples CC-SS01 through CC-SS04 and CC-WC14 were analyzed for Toxicity Characteristics Leaching Procedure (TCLP) metals. Samples CC-SS04 and CC-WC14 were also analyzed for TCLP organic compounds (VOCs, SVOCs and pesticides), flammability, pH, reactive cyanide and reactive sulfide. Only sample CC-WC14 was characterized with the paint filter test.

All samples were labeled and preserved in coolers with ice immediately after sample collection. At the end of the sampling period, samples were packed, transported, and relinquished under chain of custody to Severn Trent Laboratories (STL), in University Park, Illinois for analysis.

Spent personal protective equipment (PPE) and contaminated debris that was generated during the sampling event were containerized in a 55-gallon drum, labeled and stored on site.

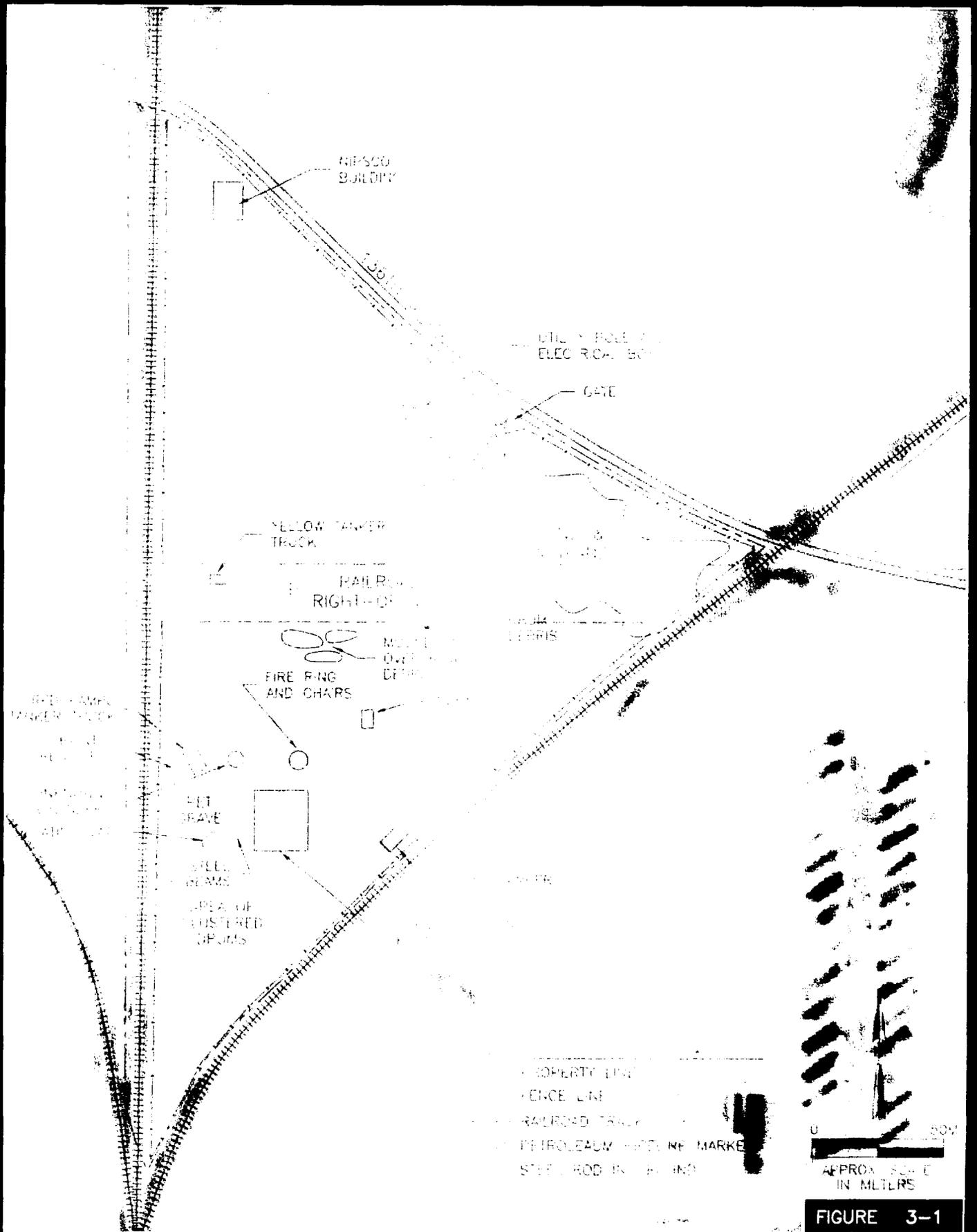


FIGURE 3-1

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750 E. Bunker Ct.
 Suite 500
 Vernon Hills, Illinois
 60061

DETAILED SITE MAP
 CALUMET CONTAINER SITE
 U.S. EPA
 Chicago, Illinois

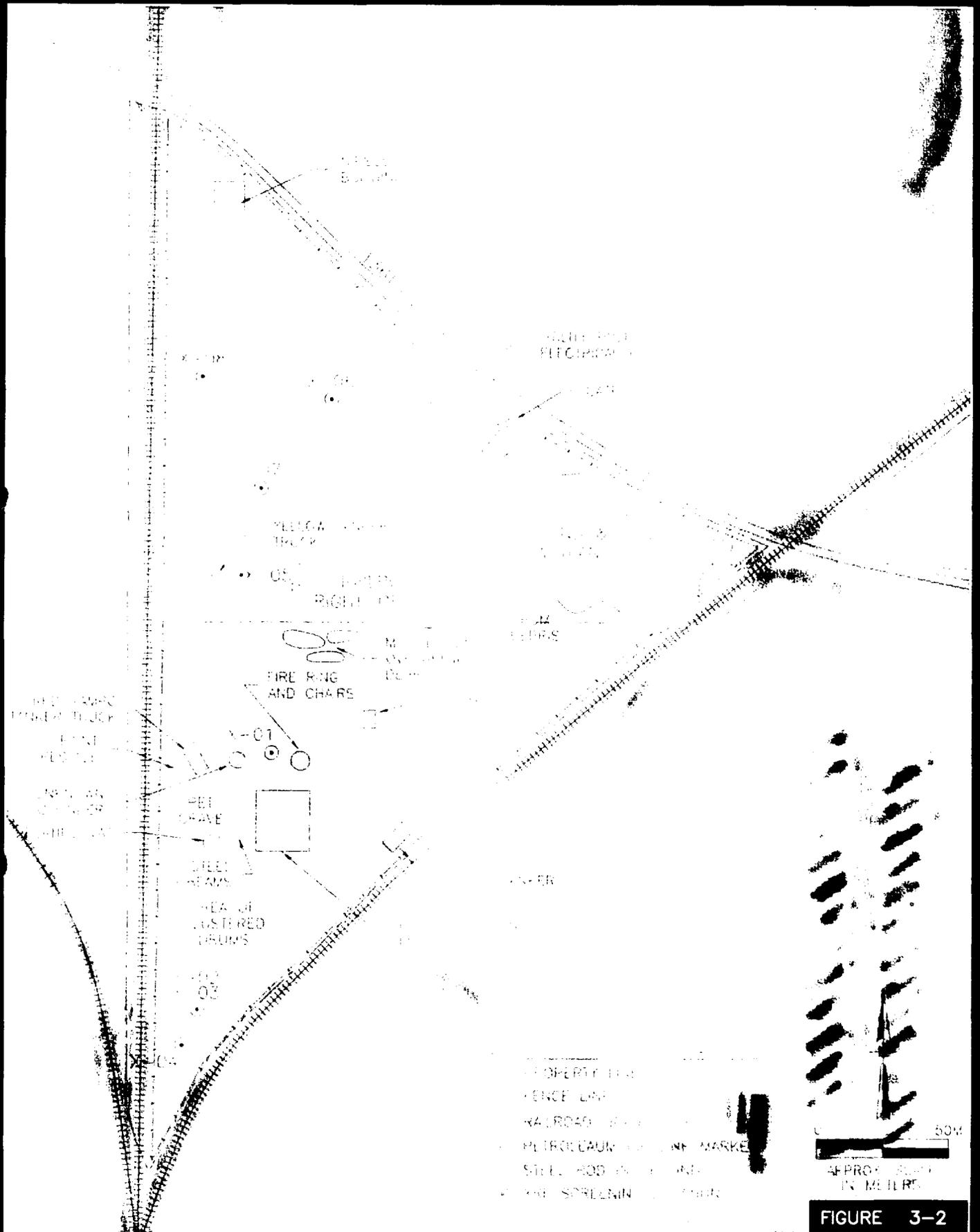


FIGURE 3-2



750 E. Bunker Ct.
 Suite 500
 Vernon Hills, Illinois
 60061

XRF SCREENING LOCATIONS
 CALUMET CONTAINER SITE
 U.S. EPA
 Chicago, Illinois

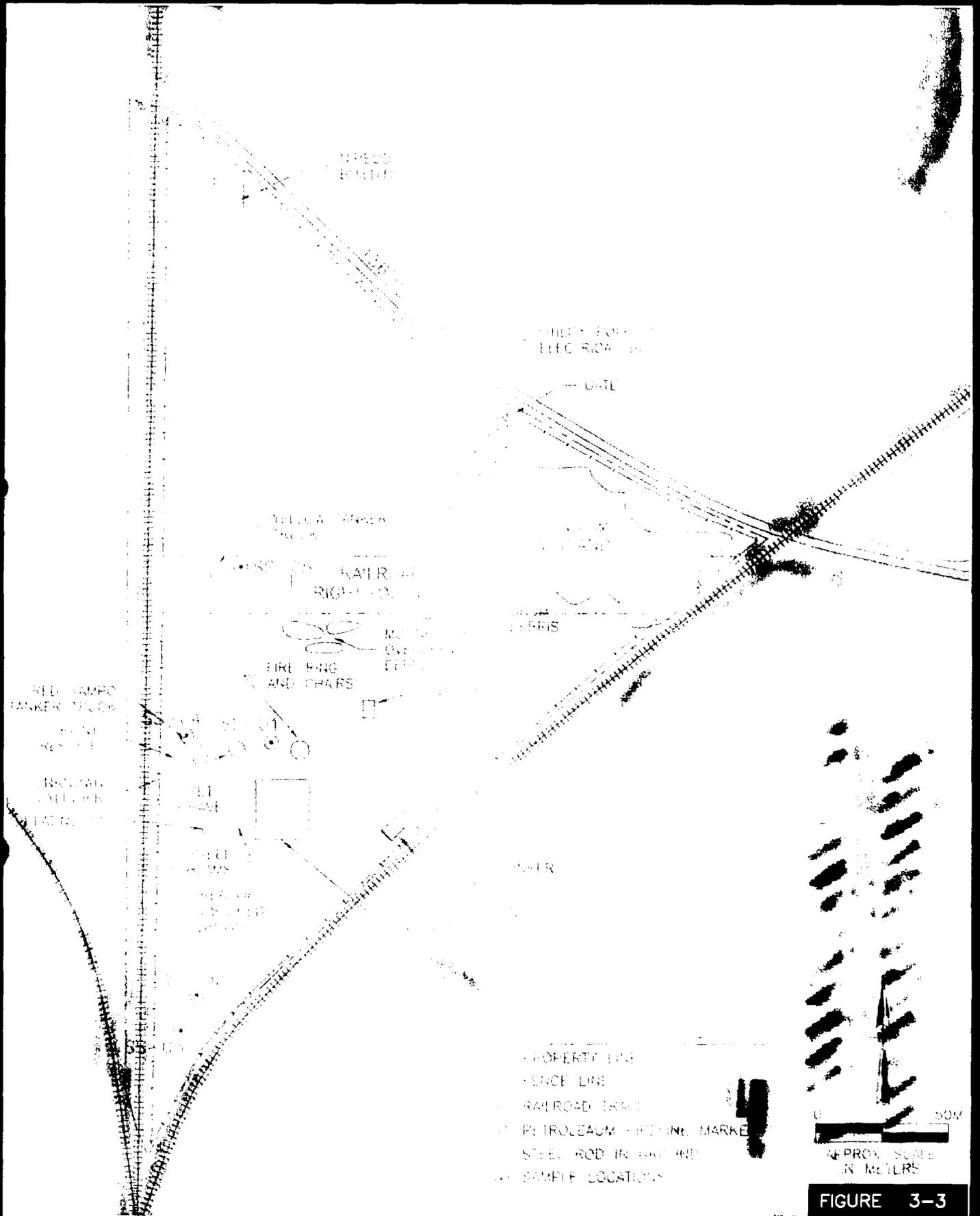


FIGURE 3-3

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 Vernon Hills, Illinois
 60061

SAMPLING LOCATIONS
CALUMET CONTAINER SITE
 U.S. EPA
 Chicago, Illinois

SECTION 4

ENVIRONMENTAL INVESTIGATION RESULTS

Based on results from *in situ* lead screening of soils by XRF while on site (Table 4-1), five investigative soil samples were collected from five locations during this investigation and delivered to a laboratory. One drum sample was collected from a drum in the cluster at the north gate and delivered to the same laboratory. Analytical parameter selections for each sample are outlined in Section 3.2. Analytical results for these analyses were compared to a regulatory criteria level and presented in Tables 4-2 through 4-11. Three sets of criteria were used for comparison in the data presentation; U.S. EPA Region IX Preliminary Remediation Goals (PRGs), the State of Indiana Risk Integrated System of Closure (RISC) cleanup protocols, and 40 CFR Part 261, characteristics of hazardous waste. Criteria levels for industrial-use land were used to evaluate the data.

4.1 SOIL SAMPLING

4.1.1 Lead Screening of Soil by XRF

During this investigation, a preliminary screening of lead concentration in on-site soil was performed throughout the site with an XRF unit, particularly those areas that exhibited visual indications of contamination (e.g. soil staining or proximity to paint chips or drum debris). Sampling locations where XRF screening was performed are documented in Figure 3-2. The XRF sampling results are presented in Table 4-1. At those locations where the XRF unit detected relatively high lead concentrations, soil samples were collected for chemical analysis.

Five on-site locations (CC-S-01 through CC-SS05) were selected for chemical analysis. Results of the XRF screening results that correspond to locations where soil samples were collected for chemical analysis are presented in Table 4-1 along with a sampling summary. Of those soil samples chosen for chemical analysis, lead concentrations determined by XRF ranged from 1,357 parts per

million (ppm) (CC-SS05) to 13.630 ppm (CC-SS01). The highest concentrations of lead determined by XRF in soils were 13.630 ppm (CC-SS01) and 3.460 ppm (CC-SS02).

4.1.2 Soil Analysis for Characteristics of Hazardous Waste

4.1.2.1 TCLP Metals in Soil

Four surface soil samples were analyzed for TCLP metals, locations CC-SS01 through CC-SS04. As indicated in Table 4-2, concentrations of TCLP lead and TCLP cadmium exceeded the criteria for toxicity in sample CC-SS01. At location CC-SS01, TCLP lead was detected at 33.3 milligrams per liter (mg/L) and TCLP cadmium was detected at 4.17 mg/L.

4.1.2.2 TCLP Pesticides in Soil

One surface soil sample, from location CC-SS04, was analyzed for TCLP pesticides. Analytical results are presented in Table 4-3. None of the results were above method detection limits.

4.1.2.3 TCLP VOCs in Soil

Soil sample CC-SS04 was analyzed for TCLP VOCs. Analytical results are presented in Table 4-4. None of the results were above the method detection limits.

4.1.2.4 TCLP SVOCs in Soil

Soil sample CC-SS04 was analyzed for TCLP SVOCs. Analytical results are listed in Table 4-5. No SVOCs were detected at concentrations greater than the method detection limits.

4.1.2.5 Other Characteristics of Hazardous Waste in Soil

Soil collected at sampling location CC-SS04 was subjected to other analyses for the characteristics of hazardous waste. This sample was collected at the base of the red "Kampo" tanker truck located at the western edge of the site. The tanker was leaking an unknown liquid and organic vapors were detected in the area. The results are presented in Table 4-6. Results indicate that soil in this sample

was not hazardous. The soil had a pH of 8 (at 21.1 degrees Fahrenheit (°F)), a flashpoint greater than 200 °F and cyanide and sulfide reactivities less than the method detection limits.

4.1.3 TAL Metals in Soil

Surface soils were sampled at five locations and five investigative samples were submitted for TAL metals analysis (CC-SS01 through CC-SS05). Four out of five samples had concentrations of both lead and chromium that were above industrial criteria levels (Table 4-7). Lead concentrations in the samples ranged from 588 mg/kg to 35,900 mg/kg and was found in highest concentrations at sampling locations CC-SS01 (35,900 mg/kg) and CC-SS02 (3,480 mg/kg). Concentrations of chromium in soils ranged from 180 mg/kg to 6,370 mg/kg and were found to be at greatest concentrations in soils at sampling locations CC-SS01 (6,370 mg/kg) and CC-SS05 (680 mg/kg). Soil at sampling location CC-SS01 contained iron at a concentration of 264,000 mg/kg, greater than the industrial criteria level. No other TAL metals were found at concentrations greater than the criteria levels in these soil samples.

4.1.4 PCBs and Pesticides in Soil

Four surface soil samples were analyzed for PCBs and pesticides (CC-SS01, CC-SS02, CC-SS04, and CC-SS05). PCB and pesticide analytical results are displayed in Tables 4-8 and 4-9, respectively. No pesticide compounds were detected above criteria levels in these samples. Three of the four samples contained total PCB concentrations greater than the criteria level. Total PCB concentrations at locations CC-SS02 (5,700 ug/kg), CC-SS04 (1,600 ug/kg) and CC-SS05 (2,760 ug/kg) also exceeded the criteria level (1,000 ug/kg) for these compounds. Individual Aroclors - 1254 and -1260 were detected at concentrations above method limits in these samples. Aroclor-1254 was detected in samples CC-SS02 (4,100 ug/kg), CC-SS04 (1,600 ug/kg) and CC-SS05 (2,100 ug/kg). Aroclor-1260 was detected in sample CC-SS02 (1,600 ug/kg).

4.1.5 VOCs in Soil

Four surface soil samples (CC-SS01, CC-SS02, CC-SS04 and CC-SS05) were analyzed for VOCs.

The results from the VOC analysis in these soils are presented in Table 4-10. Results indicate that no VOCs were detected at levels greater than the criteria levels and only three VOCs were measured at concentrations at or above the method detection limits. All of the VOCs that were detected were found in sample CC-SS04: acetone (430 ug/kg), 2-butanone (MEK) (240 ug/kg), and carbon disulfide (4.7 ug/kg).

4.1.6 SVOCs in Soil

Four surface soil samples (CC-SS01, CC-SS02, CC-SS04 and CC-SS05) were analyzed for SVOCs. The results are displayed in Table 4-11. Criteria levels were not exceeded by any SVOCs in these samples. Fifteen SVOCs were detected above method limits. The SVOCs found in greatest concentration in these samples were: bis(2-ethylhexyl)phthalate (10,000 ug/kg, CC-SS01), 2-nitroaniline (8,300 ug/kg, CC-SS01), and isophorone (3,100 ug/kg, CC-SS05).

4.2 DRUM SAMPLING

4.2.1 Drum Sample Analysis for Characteristics of Hazardous Waste

4.2.1.1 TCLP Metals in Drum Sample

An analysis of TCLP metals was performed on the drum sample CC-WC14. As indicated in Table 4-12, none of the concentrations of TCLP metals exceeded the criteria for toxicity. One metal, barium, was detected above method limits (0.137 mg/L).

4.2.1.2 TCLP Pesticides in Drum Sample

TCLP pesticides were determined for the drum sample CC-WC14. Table 4-13 indicates that concentrations of TCLP pesticides did not exceed the criteria for toxicity. None of the results yielded concentrations were above method detection limits.

4.2.1.3 TCLP VOCs in Drum Sample

Results from the analysis of TCLP VOCs on waste sample CC-WC14 are presented in Table 4-14. No VOCs were detected at concentrations greater than the criteria for toxicity. One compound was detected above the method detection limit; 2-butanone (MEK) (97.000 ug/L).

4.2.1.4 TCLP SVOCs in Drum Sample

The drum sample CC-WC14 was analyzed for TCLP SVOCs. Analytical results are listed in Table 4-15. No SVOCs were detected at concentrations greater than method detection limit and the criteria for toxicity was not exceeded by any compound.

4.2.1.5 Other Characteristics of Hazardous Waste in Drum Sample

Analyses for other characteristics of hazardous waste were performed on the material collected from the drum CC-DM14 (sample CC-WC14). The results are presented in Table 4-16. Results indicate that the drum material is a hazardous waste. The material had a flashpoint of 80 °F which is below the criteria level (less than 140 °F), indicating that the drum material is a hazardous waste. Other results indicated that the drum material had a pH of 3.8 (at 21.4 °F), and cyanide and sulfide reactivities less than the method detection limits.

Table 4 - 1

**Soil *in situ* XRF Scan Results for Lead and Sampling Summary
 Calumet Container Site, Hammond, IN**

XRF Screening ID	Lead (ppm)	Corresponding Soil Sample ID	Sample Type	Sample Location
X01	13,630	CC-SS01	soil	near old bldg foundation
X02	1,416	CC-SS02	soil	SW corner of site
X03	3,460	CC-SS02	soil	SW corner of site
X04	2,060	CC-SS03	soil	SW corner of site
NA	NA	CC-SS04	soil	at leaking red tanker truck
X05	1,357	CC-SS05	soil	at yellow tanker truck
X06	400	NA	NA	NW corner of site
X07	250	NA	NA	NW corner of site
X08	100	NA	NA	NW corner of site

ppm = parts per million (or milligrams per kilogram)

NA = Not applicable, no sample taken

Table 4 - 2

Results of TCLP Analysis for Metals in Soil
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS03	CC-SS04	Criteria Level ^a
Sample Type	soil	soil	soil	soil	
Chemical Name					
Arsenic (mg/L)	0.100 U	0.100 U	0.100 U	0.100 U	5.0
Barium (mg/L)	3.93	1.88	1.49	1.01	100.0
Cadmium (mg/L)	4.17	0.0538	0.0863	0.0368	1.0
Chromium (mg/L)	0.0287 B	0.230	0.234	0.0273	5.0
Lead (mg/L)	33.3	0.930	2.64	2.36	5.0
Mercury (mg/L)	0.0020 U	0.0020 U	0.0020 U	0.002 U	0.2
Selenium (mg/L)	0.100 U	0.100 U	0.100 U	0.0153	1.0
Silver (mg/L)	0.0500 U	0.0500 U	0.0500 U	0.0500 U	5.0

^a 40 CFR - Chapter I - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U are below method detection limits
 mg/L = milligrams per liter

Table 4 - 3

Results of TCLP Analysis for Pesticides in Soil
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS04	Criteria Level ^a
Sample Type	soil	
Chemical Name		
gamma-BHC (Lindane) (ug/L)	2.5 U	400
Chlordane (ug/L)	10 U	30
Endrin(ug/L)	5.0 U	20
Heptachlor (ug/L)	2.5 U	8
Heptachlor epoxide (ug/L)	2.5 U	8
Methoxychlor (ug/L)	25 U	10,000
Toxaphene (ug/L)	50 U	500

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 ug/L = micrograms per liter

Table 4 - 4

Results of TCLP Analysis for Volatile Organic Compounds in Soil
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS04	Criteria Level ^a
Sample Type	soil	
Chemical Name		
1,1-Dichloroethene (ug/L)	100 U	700
1,2-Dichloroethane (ug/L)	100 U	500
2-Butanone (MEK) (ug/L)	730 U	200,000
Benzene (ug/L)	100 U	500
Carbon tetrachloride (ug/L)	100 U	500
Chlorobenzene (ug/L)	100 U	100,000
Chloroform (ug/L)	100 U	6,000
Tetrachloroethene (ug/L)	100 U	700
Trichloroethene (ug/L)	100 U	500
Vinyl chloride (ug/L)	100 U	200

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 Sample concentrations flagged with J are estimated
 ug/L = micrograms per liter

Table 4 - 5

Results for TCLP Analysis for Semivolatile Organic Compounds in Soil
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS04	Criteria Level ^a
Sample Type	soil	
Chemical Name		
Pyridine (ug/L)	200 U	5,000
1,4-Dichlorobenzene (ug/L)	100 U	7,500
2,4,5-Trichlorophenol (ug/L)	500 U	400,000
2,4,6-Trichlorophenol (ug/L)	100 U	2,000
2,4-Dinitrotoluene (ug/L)	100 U	130
2-Methylphenol (o-Cresol) (ug/L)	100 U	200,000
4-Methylphenol (m/p-cresol) (ug/L)	100 U	200,000
Hexachlorobenzene (ug/L)	100 U	130
Hexachlorobutadiene (ug/L)	100 U	500
Hexachloroethane (ug/L)	100 U	3,000
Nitrobenzene (ug/L)	100 U	2,000
Pentachlorophenol (ug/L)	500 U	100,000

^a 40 CFR - Chapter I - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 Sample concentrations flagged with J are estimated
 ug/L = micrograms per liter

Table 4 - 6

Results of Soil Analysis for Other Characteristics of Hazardous Waste
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS04	Criteria Level*
Sample Type	soil	
Analysis		
Cyanide Reactivity (mg/kg)	2.5 U	250
Sulfide Reactivity (mg/kg)	250 U	500
pH (temperature at analysis)	8 (21.1°F)	2 > pH or pH > 12.5
Flashpoint (°F)	>200	<140
Paint filter test	NA	0 = solid

* 40 CFR - Chapter 1 - 261.21 and 261.23

Bold and highlighted sample results exceed the criteria level

Sample concentrations flagged with U were below method detection limits

NA = not applicable

mg/kg = milligrams per kilogram

°F = degrees Fahrenheit

Table 4 - 7

Surface Soil Metals Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS03	CC-SS04	CC-SS05	CC-SS5DP	Criteria Level	
	soil	soil	soil	soil	soil	soil	Industrial	
Chemical Name							Region IX ^a	RISC ^b
Aluminum (mg/kg)	12,100	3,630	3,620	8,030	4890	5120	100,000	N.L.
Antimony (mg/kg)	275 J	42.9 J	14.5 J	5.9 J	10.1 J	7.3 J	818	620
Arsenic (mg/kg)	10.2 J	5.6 J	5 J	19.7 J	9.0 J	7.4 J	439	20
Barium (mg/kg)	4,930 J	733 J	1,030 J	730 J	647 J	280 J	100,000	98,000
Beryllium (mg/kg)	1.8 U	0.34	0.25	0.78	0.21	0.18	2,242	2,900
Cadmium (mg/kg)	536 J	4.6 J	7.1 J	5.3 J	44.8 J	20.8 J	809	780
Calcium (mg/kg)	17,600 J	28,600 J	26,600	20,400 J	58500 J	96600 J	N.L.	N.L.
Chromium (mg/kg)	6,370	589	509	180	680	585	448	N.L.
Cobalt (mg/kg)	112 J	10.2 J	15.8 J	22.9 J	15.5 J	13.5 J	100,000	N.L.
Copper (mg/kg)	1,280 J	297 J	454 J	164 J	521 J	433 J	75,908	57,000
Iron (mg/kg)	264,000	22,800	20,000	78,500	72600	72300	100,000	N.L.
Lead (mg/kg)	35,900	3,480	2,550	588	1410	986	750	1,300
Magnesium (mg/kg)	2,310 J	14,500 J	12,200 J	10,400 J	14100 J	18500 J	N.L.	N.L.
Manganese (mg/kg)	2,190 J	3,550 J	709 J	791 J	7660 J	12500 J	32,250	N.L.
Mercury (mg/kg)	3.5	1.2	2.5	0.69	1.0	1.3	613	150
Nickel (mg/kg)	449	15.6	15	78.4	51.0	25.3	40,877	31,000
Potassium (mg/kg)	312	368 U	318	1400	511	531	N.L.	N.L.
Selenium (mg/kg)	30.6	0.86 U	1.2 U	2.8	13.6	5.8	10,220	7,800
Silver (mg/kg)	2.3 U	0.43 U	1.1	0.73 U	0.52 U	0.50 U	10,220	7,800
Sodium (mg/kg)	451 UJ	429 UJ	582 UJ	2,050 J	269 J	328 J	N.L.	N.L.
Thallium (mg/kg)	4.5 U	0.86 U	1.2 U	1.5 U	1.0 U	1.9	135	140
Vanadium (mg/kg)	23.3 J	33.9 J	18.9 J	23.6 J	163 J	291 J	14,308	N.L.
Zinc (mg/kg)	3,690 J	821 J	1,620 J	782 J	997 J	944 J	100,000	470,000

^a U.S. EPA Region IX Industrial PRGs for Combined Exposure Pathways

^b Indiana RISC closure levels, direct contact soils

Bold and highlighted sample concentrations are higher than the most conservative industrial criteria level for that compound

Highlighted criteria levels are the most conservative of those listed for industrial soils

Sample concentrations flagged with U were below method detection limits

Sample concentrations flagged with J are estimated

N.L. = Not listed

mg/kg = milligrams per kilogram

Table 4 -8

Surface Soil PCB Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DP	Criteria Level	
						Industrial	
Sample Type	soil	soil	soil	soil	soil	Region IX ^a	RISC ^b
Chemical Name							
Aroclor-1016 (ug/kg)	20 U	490 U	120 U	100 U	110 U	28,705	N.L.
Aroclor-1221 (ug/kg)	20 U	490 U	120 U	100 U	110 U	1,000	N.L.
Aroclor-1232 (ug/kg)	20 U	490 U	120 U	100 U	110 U	1,000	N.L.
Aroclor-1242 (ug/kg)	20 U	490 U	120 U	100 U	110 U	1,000	N.L.
Aroclor-1248 (ug/kg)	110	490 U	120 U	100 U	110 U	1,000	N.L.
Aroclor-1254 (ug/kg)	20 U	4100	1600	2100	1900	1,000	N.L.
Aroclor-1260 (ug/kg)	47	1600	120 U	660	650	1,000	N.L.
Total PCBs (ug/kg)	157	5700	1600	2760	2550	1,000	5,300

^a U.S. EPA Region IX Industrial PRGs for Combined Exposure Pathways

^b Indiana RISC closure levels, direct contact soils

Bold and highlighted sample concentrations are higher than the most conservative industrial criteria level for that compound

Highlighted criteria levels are the most conservative of those listed for industrial soils

Sample concentrations flagged with U were below method detection limits

N.L. = Not listed

ug/kg = micrograms per kilogram

Table 4 - 9

Surface Soil Pesticides Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DP	Criteria Level	
						Industrial	
Sample Type	soil	soil	soil	soil	soil	Region IX ^a	RISC ^b
Chemical Name							
Aldrin (ug/kg)	51 U	20 U	24 U	10 U	11 U	145	800
alpha-BHC (ug/kg)	51 U	20 U	24 U	10 U	11 U	594	4,000
beta-BHC (ug/kg)	51 U	20 U	24 U	10 U	11 U	2,080	14,000
delta-BHC (ug/kg)	51 U	20 U	24 U	10 U	11 U	N.L.	N.L.
gamma-BHC (Lindane) (ug/kg)	51 U	20 U	24 U	5.9 JA	11 U	2,881	19,000
alpha-Chlordane (ug/kg)	51 U	580	100	21	22	10,699	68,000
gamma-Chlordane (ug/kg)	51 U	730	84	43	49	17,618,381	N.L.
4,4'-DDD (ug/kg)	100 U	40 U	68	9.9 JA	23 U	17,078	120,000
4,4'-DDE (ug/kg)	100 U	38 JA	20 JA	31	30	12,055	86,000
4,4'-DDT (ug/kg)	100 U	40 U	93	21 U	23 U	12,055	86,000
Dieldrin (ug/kg)	100 U	67	47 JA	34	38	154	860
Endosulfan I (ug/kg)	51 U	20 U	24 U	10 U	11 U	5,285,514	2,900,000
Endosulfan II (ug/kg)	100 U	40 U	49 U	21 U	23 U	N.L.	N.L.
Endosulfan sulfate (ug/kg)	100 U	11 JA	17 JA	21 U	7.5 JA	N.L.	N.L.
Endrin (ug/kg)	100 U	40 U	48 J	21 U	23 U	264,276	150,000
Endrin aldehyde (ug/kg)	100 U	69	49 U	60	23 JA	N.L.	N.L.
Endrin ketone (ug/kg)	100 U	40 U	73	21 U	23 U	N.L.	N.L.
Heptachlor (ug/kg)	51 U	20 U	24 U	10 U	11 U	548	1,200
Heptachlor epoxide (ug/kg)	51 U	12 JA	24 U	10 U	11 U	271	1,500
Methoxychlor (ug/kg)	510 U	200 U	96 JA	100 U	110 U	4,404,595	2,500,000
Toxaphene (ug/kg)	1000 U	390 U	480 U	210	220 U	2,242	12,000

^a U.S. EPA Region IX Industrial PRGs for Combined Exposure Pathways

^b Indiana RISC closure levels, direct contact soils

Bold and highlighted sample concentrations are higher than the most conservative industrial criteria level for that compound

Highlighted criteria levels are the most conservative of those listed for industrial soils

Sample concentrations flagged with U were below method detection limits

N.L. = not listed

ug/kg = micrograms per kilogram

Table 4 - 10

Surface Soil Volatile Organic Compounds Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DP	Criteria Level	
						Region IX*	RISC*
Sample Type	soil	soil	soil	soil	soil	Industrial	
Chemical Name						Region IX*	RISC*
1,1,1,2-Tetrachloroethane (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 U	7.0	63.0
1,1,2,2-Tetrachloroethane (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 UJ	0.9	8.7
1,1,1-Trichloroethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	1,400.0	2,700.0
1,1,2-Trichloroethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	1.9	15.0
1,1-Dichloroethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	2,061.3	1,700.0
1,1-Dichloroethene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	0.1	1.1
1,1-Dichloropropene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	N.L.
1,2,3-Trichlorobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	N.L.
1,2,3-Trichloropropane (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	0.0	N.L.
1,2,4-Trichlorobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 U	6.4 UJ	6.7 UJ	3,000.0	4,900.0
1,2,4-Trimethylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	170.0	N.L.
1,2-Dibromo-3-chloropropane (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	4.0	N.L.
1,2-Dibromoethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 UJ	6.7 U	0.048	N.L.
1,2-Dichlorobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	370.0	3,900.0
1,2-Dichloroethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	0.8	5.8
1,2-Dichloropropane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	0.8	7.2
1,3,5-Trimethylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	69.8	N.L.
1,3-Dichlorobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	51.8	38.0
1,3-Dichloropropane (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	N.L.	N.L.
1,4-Dichlorobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	8.1	73.0
2,2-Dichloropropane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	N.L.
2-Butanone (MEK) (ug/kg)	6.3 UJ	6 U	240	6.4 U	6.7 U	27,714.5	28,000.0
2-Chlorotoluene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	N.L.
2-Hexanone (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	N.L.	N.L.
4-Chlorotoluene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	N.L.
4-Methyl-2-pentanone (MIBK) (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	1,400.0

Table 4 - 10

Surface Soil Volatile Organic Compounds Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DP	Criteria Level	
						Region IX*	RISC*
Sample Type	soil	soil	soil	soil	soil	Industrial	
Chemical Name						Region IX*	RISC*
Acetone (ug/kg)	6.3 UJ	6 U	430	6.4 U	6.7 U	6,219.6	5,600.0
Benzene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	1.5	13.0
Bromobenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	92.4	N.L.
Bromochloromethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	2.4	17.0
Bromodichloromethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	2.4	17.0
Bromoform (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	312.2	580.0
Bromomethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	13.1	N.L.
Carbon disulfide (ug/kg)	6.3 UJ	6 U	4.7 J	6.4 U	6.7 U	720.0	1,200.0
Carbon tetrachloride (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	0.5	5.2
Chlorobenzene (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	542.9	510.0
Chloroethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 UJ	6.5	71.0
Chloroform (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	0.5	1.2
Chloromethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	2.7	N.L.
cis-1,2-Dichloroethene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	147.4	140.0
cis-1,3-Dichloropropene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	N.L.
Dibromochloromethane (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 U	6.7 U	2.7	N.L.
Dibromomethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	N.L.
Dichlorodifluoromethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 UJ	308.3	N.L.
Ethylbenzene (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	230.0	6,800.0
Hexachloro-1,3-butadiene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	98.0
Isopropylbenzene (Cumene) (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	522.1	N.L.
m&p-xylene (ug/kg)	13 UJ	12 U	15 UJ	13 UJ	13 U	210.0	6,200.0
Methylene chloride (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	20.5	200.0
Methyl-tert-butyl ether (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	330.0
Naphthalene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	8,000.0
n-Butylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	240.0	N.L.

Table 4 - 10

Surface Soil Volatile Organic Compounds Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DP	Criteria Level	
						Region IX ^a	RISC ^b
Sample Type	soil	soil	soil	soil	soil	Industrial	
Chemical Name						Region IX ^a	RISC ^b
n-Propylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	240.0	N.L.
o-xylene (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	N.L.	N.L.
p-Isopropyltoluene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	N.L.	N.L.
sec-Butylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 UJ	220.0	N.L.
Styrene (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	1,700.0	16,000.0
tert-Butylbenzene (ug/kg)	6.3 UJ	6 UJ	7.3 UJ	6.4 UJ	6.7 Uj	390.0	N.L.
Tetrachloroethene (ug/kg)	6.3 UJ	6 U	7.3 UJ	6.4 UJ	6.7 U	18.7	110.0
Toluene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	520.0	2,200.0
trans-1,2-Dichloroethene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	214.2	230.0
trans-1,3-Dichloropropene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	N.L.
Trichloroethene (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	6.1	72.0
Trichlorofluouromethane (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	2,000.0	N.L.
Vinyl chloride (ug/kg)	6.3 UJ	6 U	7.3 U	6.4 U	6.7 U	N.L.	0.5

^a U.S. EPA Region IX Industrial PRGs for Combined Exposure Pathways

^b Indiana RISC closure levels, direct contact soils

Bold and highlighted sample concentrations are higher than the most conservative industrial criteria level for that compound

Highlighted criteria levels are the most conservative of those listed for industrial soils

Bold and italicized criterial levels are lower than analytical detection limits

Sample concentrations flagged with U were below method detection limits

Sample concentrations flagged with J are estimated

N.L. = Not listed

ug/kg = micrograms per kilogram

Table 4 -11

Surface Soil Semivolatile Organic Compounds Sampling Results
Calumet Container Site, Hammond, IN

Sample ID Sample Type Chemical Name	CC-SS01 soil	CC-SS02 soil	CC-SS04 soil	CC-SS05 soil	CC-SS05DF soil	Criteria Level	
						Industrial	
						Region IX*	RISC*
1,2,4-Trichlorobenzene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	3,000,000	4,900,000
1,2-Dichlorobenzene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	370,000	3,900,000
1,3-Dichlorobenzene (ug/kg)	1,600 UJ	390 U	480 U	1,700 U	1,700 U	51,755	38,000
1,4-Dichlorobenzene (ug/kg)	1,600 UJ	390 U	480 U	1,700 U	1,700 U	8,129	73,000
2,2-oxybis (1-chloropropane) (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
2,4,5-Trichlorophenol (ug/kg)	8,300 U	2,000 U	2,500 U	8,600 U	8,900 U	88,091,907	49,000,000
2,4,6-Trichlorophenol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	224,234	1,300,000
2,4-Dichlorophenol (ug/kg)	1,600 U	390 U	100 J	1,700 U	1,700 U	2,642,757	1,500,000
2,4-Dimethylphenol (ug/kg)	1,600 UJ	390 U	480 U	1,700 U	1,700 U	17,618,381	9,800,000
2,4-Dinitrophenol (ug/kg)	83	2,000 U	2,500 U	8,600 U	8,900 U	1,761,838	980,000
2,4-Dinitrotoluene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	1,761,838	N.L.
2,6-Dinitrotoluene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	880,919	N.L.
2-Chloronaphthalene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
2-Chlorophenol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	241,335	580,000
2-Methylnaphthalene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
2-Methylphenol (o-Cresol) (ug/kg)	1,600 UJ	390 U	480 U	1,700 U	1,700 U	44,045,954	17,000,000
2-Nitroaniline (ug/kg)	8,300	2,000 U	2,500 U	8,600 U	8,900 U	50,338	28,000
2-Nitrophenol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	38,358,301	24,000,000
3,3'-Dichlorobenzidine (ug/kg)	3,300 UJ	790 U	970 U	3,400 U	3,500 U	176,184	N.L.
3-Nitroaniline (ug/kg)	8,300 UJ	2,000 U	2,500 U	8,600 U	8,900 U	N.L.	N.L.
4,6-Dinitro-2-methylphenol (ug/kg)	8,300 U	2,000 U	2,500 U	8,600 U	8,900 U	N.L.	N.L.
4-Bromophenylphenyl ether (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	4,253	N.L.
4-Chloro-3-methylphenol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
4-Chloroaniline (ug/kg)	1,600 UJ	390 U	480 U	1,700 U	1,700 U	17,618,381	N.L.
4-Chlorophenylphenyl ether (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
4-Methylphenol (m/p-cresol) (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	7,047,353	N.L.

Table 4 -11

Surface Soil Semivolatile Organic Compounds Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DF	Criteria Level	
						Region IX*	RISC*
Sample Type	soil	soil	soil	soil	soil	Industrial	
Chemical Name						Region IX*	RISC*
4-Nitroaniline (ug/kg)	8,300 UJ	2,000 U	2,500 U	8,600 U	8,900 U	N.L.	N.L.
4-Nitrophenol (ug/kg)	8,300 U	2,000 U	2,500 U	8,600 U	8,900 U	283,514	N.L.
Acenaphthene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	289	1,500
Acenaphthylene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
Anthracene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	817,599	620,000
Benzidine (ug/kg)	16,000 UJ	3,900 U	4,800 U	17,000 U	17,000 U	N.L.	N.L.
Benzo(a)anthracene (ug/kg)	1,600 U	100 J	160 J	1,700 U	1,700 U	88,091,907	N.L.
Benzo(a)pyrene (ug/kg)	1,600 U	180 J	190 J	1,700 U	1,700 U	54,224,141	15,000,000
Benzo(b)fluoranthene (ug/kg)	1,600 U	220 J	270 J	1,700 U	1,700 U	N.L.	150,000
Benzo(g,h,i)perylene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
Benzo(k)fluoranthene (ug/kg)	1,600 U	140 J	180 J	1,700 U	1,700 U	100,000,000	1,000,000,000
Benzoic acid (ug/kg)	8,300 U	2,000 U	2,500 U	8,600 U	8,900 U	190	N.L.
Benzyl alcohol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	2,310	N.L.
bis(2-Chloroethoxy) methane (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
bis(2-Chloroethyl) ether (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	8,078	61,000
bis(2-Ethylhexyl)phthalate (ug/kg)	10,000 J	450	2,800	7,300	8,200	N.L.	N.L.
Butylbenzylphthalate (ug/kg)	1,600 J	390 U	480 U	1,300 J	1,000 J	44,045,954	N.L.
Carbazole (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	4,404,595	N.L.
Chrysene (ug/kg)	1,600 U	170 J	230 J	220 J	1,700 U	100,000,000	N.L.
Dibenz(a,h)anthracene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	5,062,805	N.L.
Dibenzofuran (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	2,654	N.L.
Diethylphthalate (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	5,021,239	N.L.
Dimethylphthalate (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	88,091,907	N.L.
Di-n-butylphthalate (ug/kg)	370 J	390 U	190 J	720 J	800 J	3,627	20,000
Di-n-octylphthalate (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	880,919	N.L.
Fluoranthene (ug/kg)	1,600 U	150 J	280 J	1,700 U	1,700 U	N.L.	16,000,000

Table 4 -11

Surface Soil Semivolatile Organic Compounds Sampling Results
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS01	CC-SS02	CC-SS04	CC-SS05	CC-SS05DF	Criteria Level	
						Industrial	
						Region IX ^a	RISC ^b
Fluorene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	70,473,526	N.L.
Hexachlorobenzene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	31,623	N.L.
Hexachlorobutadiene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	5,896,843	3,400,000
Hexachlorocyclopentadiene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	N.L.	N.L.
Hexachloroethane (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	264,276	N.L.
Indeno(1,2,3-cd)pyrene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	35,236,763	N.L.
Isophorone (ug/kg)	1,600 UJ	230 J	300 J	3,100	4,100	13,213,786	N.L.
Naphthalene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	88,091,907	N.L.
Nitrobenzene (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	61,664,335	N.L.
N-Nitroso-di-n-propylamine (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	881	N.L.
N-Nitrosodiphenylamine (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	112	N.L.
Pentachlorophenol (ug/kg)	8,300 U	2,000 U	2,500 U	8,600 U	8,900 U	1,021,998	N.L.
Phenanthrene (ug/kg)	1,600 U	390 U	140 J	1,700 U	1,700 U	N.L.	N.L.
Phenol (ug/kg)	1,600 U	390 U	480 U	1,700 U	1,700 U	1,761,838	N.L.
Pyrene (ug/kg)	1,600 U	390 U	250 J	1,700 U	1,700 U	7,047,353	N.L.

^a U.S. EPA Region IX Industrial PRGs for Combined Exposure Pathways

^b Indiana RISC closure levels, direct contact soils

Bold and highlighted sample concentrations are higher than the most conservative industrial criteria level for that compound

Highlighted criteria levels are the most conservative of those listed for industrial soils

Sample concentrations flagged with U were below method detection limits

Sample concentrations flagged with J are estimated

N.L. = Not listed

ug/kg = micrograms per kilogram

Table 4 - 12

Results of TCLP Analysis for Metals in Drum Sample
 Calumet Container Site, Hammond, IN

Sample ID	CC-WC14	Criteria Level ^a
Sample Type	waste	
Chemical Name		
Arsenic (mg/L)	0.100 U	5.0
Barium (mg/L)	0.137	100.0
Cadmium (mg/L)	0.050 U	1.0
Chromium (mg/L)	0.050 U	5.0
Lead (mg/L)	0.050 U	5.0
Mercury (mg/L)	0.002 U	0.2
Selenium (mg/L)	0.100 U	1.0
Silver (mg/L)	0.050 U	5.0

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U are below method detection limits
 mg/L = milligrams per liter

Table 4 - 13

Results of TCLP Analysis for Pesticides in Drum Sample
 Calumet Container Site, Hammond, IN

Sample ID	CC-WC14	Criteria Level ^a
Sample Type	waste	
Chemical Name		
gamma-BHC (Lindane) (ug/L)	2.5 U	400
Chlordane (ug/L)	10 U	30
Endrin(ug/L)	5.0 U	20
Heptachlor (ug/L)	2.5 U	8
Heptachlor epoxide (ug/L)	2.5 U	8
Methoxychlor (ug/L)	25 U	10,000
Toxaphene (ug/L)	50 U	500

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 ug/L = micrograms per liter

Table 4 - 14

Results of TCLP Analysis for Volatile Organic Compounds in Drum Sample
 Calumet Container Site, Hammond, IN

Sample ID	CC-WC14	Criteria Level ^a
Sample Type	waste	
Chemical Name		
1,1-Dichloroethene (ug/L)	100 U	700
1,2-Dichloroethane (ug/L)	100 U	500
2-Butanone (MEK) (ug/L)	97,000 J	200,000
Benzene (ug/L)	100 U	500
Carbon tetrachloride (ug/L)	100 U	500
Chlorobenzene (ug/L)	100 U	100,000
Chloroform (ug/L)	100 U	6,000
Tetrachloroethene (ug/L)	100 U	700
Trichloroethene (ug/L)	100 U	500
Vinyl chloride (ug/L)	100 U	200

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 Sample concentrations flagged with J are estimated
 ug/L = micrograms per liter

Table 4 - 15

Results for TCLP Analysis for Semivolatile Organic Compounds in Drum Sample
 Calumet Container Site, Hammond, IN

Sample ID	CC-WC14	Criteria Level ^a
Sample Type	waste	
Chemical Name		
Pyridine (ug/L)	2000 U	5,000
1,4-Dichlorobenzene (ug/L)	1000 U	7,500
2,4,5-Trichlorophenol (ug/L)	5000 U	400,000
2,4,6-Trichlorophenol (ug/L)	1000 U	2,000
2,4-Dinitrotoluene (ug/L)	1000 U	130
2-Methylphenol (o-Cresol) (ug/L)	1000 U	200,000
4-Methylphenol (m/p-cresol)	1000 U	200,000
Hexachlorobenzene (ug/L)	1000 U	130
Hexachlorobutadiene (ug/L)	1000 U	500
Hexachloroethane (ug/L)	1000 U	3,000
Nitrobenzene (ug/L)	1000 UJ	2,000
Pentachlorophenol (ug/L)	5000 U	100,000

^a 40 CFR - Chapter 1 - 261.24, Maximum concentration of contaminants for the toxicity characteristic
 Bold and highlighted sample concentrations are higher than the criteria level for that compound
 Sample concentrations flagged with U were below method detection limits
 Sample concentrations flagged with J are estimated
 ug/L = micrograms per liter

Table 4 - 16

Results of Drum Sample Analysis for Other Characteristics of Hazardous Waste
 Calumet Container Site, Hammond, IN

Sample ID	CC-SS02	Criteria Level ^a
Sample Type	waste	
Analysis		
Cyanide Reactivity (mg/kg)	2.4 U	250
Sulfide Reactivity (mg/kg)	220 U	500
pH (temperature at analysis)	3.8 (21.4°F)	2 > pH or pH > 12.5
Flashpoint (°F)	80	< 140
Paint filter test	0	0 = solid

^a 40 CFR - Chapter 1 - 261.21 and 261.23

Bold and highlighted sample results exceed the criteria level

Sample concentrations flagged with U were below method detection limits

NA = not applicable

mg/kg = milligrams per kilogram

°F = degrees Fahrenheit

SECTION 5

THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

Conditions present on the Calumet Container site that warrant an appropriate removal action as set forth in paragraph (b)(2) of 40 CFR Part 300.415 of the National Oil and Hazardous Substances Contingency Plan (NCP) include the following:

- **Actual or Potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;**

Analytical results indicate that surface soil has been impacted by elevated concentrations of lead, chromium and PCBs. Total lead concentrations on site were detected up to a maximum concentration of 35,900 mg/kg and exceeded the U.S. EPA Region IX Preliminary Remediation Goals (PRGs) for industrial soil (750 mg/kg) in four out of five soil samples. In those same samples, chromium exceeded the U.S. EPA Region IX PRGs and was detected at a maximum concentration of 6,370 mg/kg. Total PCB concentrations in soils on site surpassed criteria levels developed by the U.S. EPA Region IX PRGs and the State of Indiana RISC cleanup protocols. Both TCLP lead (33.3 mg/L at location CC-SS01) and cadmium (4.17 mg/L at location CC-SS01) in site soils exceeded the criteria for toxicity. Contents of a drum on site was found to have a flash point of 80°F, which falls below the temperature level that defines a hazardous waste (40 CFR Chapter 1 section 261). Since access to the site is unrestricted and it is apparent that human activity is common at the site, high lead, chromium and PCB levels in the site soils as well as the presence of hazardous waste on site that has been identified in soils and drum contents increase the likelihood of the site posing a significant threat to human health and the environment.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released:**

Lead, chromium and PCB concentrations in site soils significantly exceed criteria levels, and many of the areas where high concentrations were observed had little or no vegetation or cover material. In addition, the soil on site is known to be composed of beach and shoreline deposits which can be very porous, unstable and easily eroded. These factors contribute to the mobility of the soil particles via wind and overland water flow, particularly during extreme weather conditions such as storm events or high winds. Bare soils are susceptible to erosion and transport off site into streets and drainage systems. Nearby residences may also be affected by the transport of lead in soil particles that have been eroded and transported by high winds.

The proximity of Wolf Lake and Powder Horn Lake may allow for more extensive migration of contaminants off-site. Historically, surface water has tended to pond on the site; however, the exact behavior of surface water at the site, such as runoff after a storm, is not known. The proximity of the site to both lakes as well as a small stream positioned immediately to the northwest of the site that feeds Wolf Lake may make the migration of this surface water to these water bodies more likely.

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSION

The Calumet Container site is located in Hammond, Lake County, Indiana. Approximately 90 percent of the 11-acre site is located in Lake County, Indiana and the remaining 10 percent is located in Cook County, Illinois. The Calumet Container Corporation occupied the site from the time it began operations in the 1960's until it closed permanently due to a catastrophic fire on 21 April 1982. Operations at the site included drum and pail reconditioning and fiber drum processing. Both industrial- and residential-use land surrounds the site. A small pond and wetland is situated in the northeast corner of the property and across 136th Street to the north is Wolf Lake, an interstate fishing and recreational lake. Mobile home parks are located to the east and northwest of the site, and to the southwest is Powderhorn Lake and the Burnham Woods forest preserve. Lake Michigan is located less than 3 miles to the northeast of the site. Most of the site is enclosed by a fence, but access to the site is unrestricted through numerous fence-breaks and evidence of trespassing is apparent.

START conducted a site assessment on 20 February 2002, and discovered the site littered with large amounts of drum, automobile and scrap metal debris, a plating vat, three tanker trucks, an old building foundation and paint chips and residue. A cluster of 14 drums was noted near the north gate of the property. Five investigative soil samples and one drum sample were collected and analyzed for a variety of potential contaminants.

Sampling results for metals analyses indicated levels of lead, chromium, and PCBs in site soils above U.S. EPA Region IX PRG criteria levels. Based on the results of TCLP analysis of site soils and according to 40 CFR Chapter 1 - 261.24, hazardous levels of lead and cadmium were detected in site soils.

Material sampled from a drum at the site was determined to be hazardous waste based on its flashpoint. The flashpoint of the material was 80 °F which exceeds the criteria for hazardous waste. The criteria states that a material is hazardous if it has a flash point less than 140 °F.

Based on the completed site assessment, contaminated soil at the Calumet Container site poses a significant threat to human health as defined under 40 CFR §300.415(b)(2)(i)-(viii):

1. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances of pollutants or contaminants.
2. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

6.2 RECOMMENDATIONS

Based on the conclusions made from the information gathered during the Site Assessment and the analytical results, START recommends the following:

- The two drums on site that contain a hazardous waste should be removed and disposed of at a licensed hazardous waste disposal facility.
- An extent of contamination study of site soils should be conducted to determine the volume of soil that exceeds cleanup objectives.
- Test pits should be excavated in areas that potentially contain buried metallic masses to determine if hazardous wastes are present in subsurface soil.

SECTION 7

REFERENCES

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Wapora, Inc. Phase I Report - Water Pollution Investigation, Calumet Container Site, 1979.

**APPENDIX A
PHOTO LOG**



Photo 1: Drum cluster on site near north gate. 20 February 2002, D. Paxton.



Photo 2: Drum CC-DM-14 on site in drum cluster near north gate. This drum was sampled. 20 February 2002, D. Paxton.



Photo 3: Sample CC-SS-05 being collected at the yellow tanker truck near western edge of property. 20 February 2002, D. Paxton.



Photo 4: Pile of scrap metal and debris in northwest corner of site. 20 February 2002, D. Paxton.

**APPENDIX B
DRUM LOG**

Drum Log
Calumet Container Site Assessment
20 February 2002

Drum ID	size (gallons)	condition	markings	contents/notes
CC-DM1	55	poor, rusted	none	empty
CC-DM2	55	poor, rusted	none	spent PPE
CC-DM3	55	poor, rusted	none	spent PPE
CC-DM4	55	poor, rusted	"Cal. Site Waste"	spent PPE
CC-DM5	35	poor, rusted	none	spent PPE
CC-DM6	55	poor, rusted	"Cal. Site Waste 5/88"	spent PPE
CC-DM7	55	no lid	none	empty
CC-DM8	55	not noted	"Cal. Site Waste 5/88"	grout waste, spoils from well installation, spent PPE
CC-DM9	55	not noted	"Cal. Site Waste 5/88"	spent PPE
CC-DM10	55	not noted	"Cal. Site Waste 5/88"	spent PPE
CC-DM11	55	yellow in color	none	spent PPE, including silver shield PPE
CC-DM12	55	not noted	none	sample bottles labeled "Hydroscience 10/87", 2" and 4" PVC pipe, poly tubing
CC-DM13	55	on side	none	unknown, similar to contents of drum CC-DM14; contained in 110-gallon poly overpack with no lid
CC-DM14	55	on side	none	unknown, viscous, lacquer-type substance; sample collected

APPENDIX C
ANALYTICAL DATA

SEVERN TRENT LABORATORIES
ANALYTICAL REPORT

JOB NUMBER: 208300

Prepared For:

Roy F. Weston, Inc.
2501 Jolly Road
Suite 100
Okemos, MI 48864-3974

Project: START-C alumet Containment Site

Attention: Linda K. Grobka

Date: 03/07/2002

Signature

Date

Name: Eric A. Lang
Title: Project Manager
E-Mail: elang@stl-inc.com

STL Chicago
2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX: (708) 534-5211

STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION

Date: 03/07/2002

Job Number.: 208300
 Customer...: Roy F. Weston, Inc.
 Attn.....: Linda Korobka

Project Number.....: 20001943
 Customer Project ID....: START - CALUMET CONT
 Project Description....: START - Calumet Container Site

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
208300-1	CC-SS01	Soil	02/20/2002	12:10	02/21/2002	08:00
208300-2	CC-SS02	Soil	02/20/2002	12:20	02/21/2002	08:00
208300-3	CC-SS03	Soil	02/20/2002	12:40	02/21/2002	08:00
208300-4	CC-SS04	Soil	02/20/2002	12:50	02/21/2002	08:00
208300-5	CC-SS05	Soil	02/20/2002	13:10	02/21/2002	08:00
208300-6	CC-SS05DP	Soil	02/20/2002	13:10	02/21/2002	08:00
208300-7	CC-WC14	Solid	02/20/2002	16:45	02/21/2002	08:00

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled: 02/20/2002
 Time Sampled: 12:10
 Sample Matrix: Soil

Laboratory Sample ID: 208300-1
 Date Received: 02/21/2002
 Time Received: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination	79.5			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Solids, Solid	20.5			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Moisture, Solid											
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	51	U		9.9	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	beta-BHC, Solid*	51	U		9.3	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	delta-BHC, Solid*	51	U		6.8	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	gamma-BHC (Lindane), Solid*	51	U		14	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Heptachlor, Solid*	51	U		11	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Aldrin, Solid*	51	U		8.0	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Heptachlor epoxide, Solid*	51	U		8.6	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endosulfan I, Solid*	51	U		17	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Dieldrin, Solid*	100	U		21	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	4,4'-DDE, Solid*	100	U		40	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endrin, Solid*	100	U		27	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endosulfan II, Solid*	100	U		17	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	4,4'-DDD, Solid*	100	U		22	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endosulfan sulfate, Solid*	100	U		18	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	4,4'-DDT, Solid*	100	U		23	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Methoxychlor, Solid*	510	U		140	510	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	alpha-Chlordane, Solid*	51	U		7.4	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	gamma-Chlordane, Solid*	51	U		9.3	51	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Toxaphene, Solid*	1000	U		280	1000	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endrin aldehyde, Solid*	100	U		20	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
	Endrin ketone, Solid*	100	U		18	100	50.0000	ug/Kg	46154		03/05/02 0834	kd1
8082	PCB Analysis											
	Aroclor 1016, Solid*	20	U		5.9	20	2.00000	ug/Kg	46259		03/01/02 1441	mk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATIN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-1
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Aroclor 1221, Solid*	20	U		17	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
	Aroclor 1232, Solid*	20	U		9.6	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
	Aroclor 1242, Solid*	20	U		14	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
	Aroclor 1248, Solid*	110	U		9.6	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
	Aroclor 1254, Solid*	20	U		4.9	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
	Aroclor 1260, Solid*	47	U		3.9	20	2.00000	ug/Kg	46259		03/01/02 1441	mgk
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	3.5			0.068	0.42	10	mg/Kg	45768		02/22/02 1710	gok
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	12100			14.9	90.2	5	mg/Kg	45998		02/27/02 1010	lmr
	Antimony, Solid*	275			6.3	9.0	5	mg/Kg	45998		02/27/02 1010	lmr
	Arsenic, Solid*	10.2			1.7	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Barium, Solid*	4930			0.41	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Beryllium, Solid*	1.8	U		0.20	1.8	5	mg/Kg	45998		02/27/02 1010	lmr
	Cadmium, Solid*	536			0.45	0.90	5	mg/Kg	45998		02/27/02 1010	lmr
	Calcium, Solid*	17600			41.5	45.1	5	mg/Kg	45998		02/27/02 1010	lmr
	Chromium, Solid*	6370			0.72	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Cobalt, Solid*	112			0.90	2.3	5	mg/Kg	45998		02/27/02 1010	lmr
	Copper, Solid*	1280			1.7	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Iron, Solid*	264000			11.3	22.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Lead, Solid*	35900			3.4	4.5	10	mg/Kg	45998		02/27/02 1021	lmr
	Magnesium, Solid*	2310			14.4	45.1	5	mg/Kg	45998		02/27/02 1010	lmr
	Manganese, Solid*	2190			0.34	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Nickel, Solid*	449			0.99	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Potassium, Solid*	312			70.8	225	5	mg/Kg	45998		02/27/02 1010	lmr
	Selenium, Solid*	30.6			2.1	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Silver, Solid*	2.3	U		0.86	2.3	5	mg/Kg	45998		02/27/02 1010	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-1
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Sodium, Solid*	451	U		237	451	5	mg/Kg	45998		02/27/02 1010	lmr
	Thallium, Solid*	4.5	U		2.3	4.5	5	mg/Kg	45998		02/27/02 1010	lmr
	Vanadium, Solid*	23.3			0.99	2.3	5	mg/Kg	46004		02/27/02 1914	lmr
	Zinc, Solid*	3690			3.3	9.0	5	mg/Kg	45998		02/27/02 1010	lmr
8270C	Semivolatile Organics											
	Phenol, Solid*	1600	U		410	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Bis(2-chloroethyl)ether, Solid*	1600	U		450	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	1,3-Dichlorobenzene, Solid*	1600	U		450	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	1,4-Dichlorobenzene, Solid*	1600	U		360	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	1,2-Dichlorobenzene, Solid*	1600	U		420	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzyl alcohol, Solid*	1600	U		500	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2-Methylphenol (o-cresol), Solid*	1600	U		610	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2,2-oxybis (1-chloropropane), Solid*	1600	U		840	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	n-Nitroso-di-n propylamine, Solid*	1600	U		490	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Hexachloroethane, Solid*	1600	U		380	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	4-Methylphenol (m/p-cresol), Solid*	1600	U		580	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2-Chlorophenol, Solid*	1600	U		340	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Nitrobenzene, Solid*	1600	U		310	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Bis(2-chloroethoxy)methane, Solid*	1600	U		290	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	1,2,4-Trichlorobenzene, Solid*	1600	U		240	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzoic acid, Solid*	8300	U		840	8300	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Isophorone, Solid*	1600	U		240	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2,4-Dimethylphenol, Solid*	1600	U	*	1100	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Hexachlorobutadiene, Solid*	1600	U		340	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Naphthalene, Solid*	1600	U		310	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2,4-Dichlorophenol, Solid*	1600	U		280	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	4-Chloroaniline, Solid*	1600	U		620	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	2,4,6-Trichlorophenol, Solid*	1600	U		330	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-1
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,4,5-Trichlorophenol, Solid*	8300	U		330	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Hexachlorocyclopentadiene, Solid*	1600	U		590	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2-Methylnaphthalene, Solid*	1600	U		1200	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2-Nitroaniline, Solid*	8300	U		520	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2-Chloronaphthalene, Solid*	1600	U		260	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4-Chloro-3-methylphenol, Solid*	1600	U		420	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2,6-Dinitrotoluene, Solid*	1600	U		380	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2-Nitrophenol, Solid*	1600	U		380	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	3-Nitroaniline, Solid*	8300	U		680	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Dimethyl phthalate, Solid*	1600	U		370	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2,4-Dinitrophenol, Solid*	8300	U		960	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Acenaphthylene, Solid*	1600	U		270	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	2,4-Dinitrotoluene, Solid*	1600	U		360	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Acenaphthene, Solid*	1600	U		260	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Dibenzofuran, Solid*	1600	U		270	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4-Nitrophenol, Solid*	8300	U		1800	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Fluorene, Solid*	1600	U		480	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4-Nitroaniline, Solid*	8300	U		660	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4-Bromophenyl phenyl ether, Solid*	1600	U		450	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Hexachlorobenzene, Solid*	1600	U		350	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Diethyl phthalate, Solid*	1600	U		460	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4-Chlorophenyl phenyl ether, Solid*	1600	U		430	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Pentachlorophenol, Solid*	8300	U		900	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	n-Nitrosodiphenylamine, Solid*	1600	U		530	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	4,6-Dinitro-2-methylphenol, Solid*	8300	U		690	8300	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Phenanthrene, Solid*	1600	U		340	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Anthracene, Solid*	1600	U		360	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Carbazole, Solid*	1600	U		420	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk
	Di-n-butyl phthalate, Solid*	370	J		350	1600	4.00000	ug/Kg	46274		03/04/02 1743	djk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled: 02/20/2002
 Time Sampled: 12:10
 Sample Matrix: Soil

Laboratory Sample ID: 208300-1
 Date Received: 02/21/2002
 Time Received: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Benzidine, Solid*	16000	U	*	9600	16000	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Fluoranthene, Solid*	1600	U		460	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Pyrene, Solid*	1600	U		700	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Butyl benzyl phthalate, Solid*	1300	J		560	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzo(a)anthracene, Solid*	1600	U		260	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Chrysene, Solid*	1600	U		200	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	3,3-Dichlorobenzidine, Solid*	3300	U		560	3300	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Bis(2-ethylhexyl)phthalate, Solid*	10000	U		550	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Di-n-octyl phthalate, Solid*	1600	U		1300	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzo(b)fluoranthene, Solid*	1600	U		530	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzo(k)fluoranthene, Solid*	1600	U		560	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzo(a)pyrene, Solid*	1600	U		280	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Indeno(1,2,3-cd)pyrene, Solid*	1600	U		550	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Dibenzo(a,h)anthracene, Solid*	1600	U		550	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
	Benzo(ghi)perylene, Solid*	1600	U		740	1600	4.00000	ug/Kg	46274		03/04/02 1743	dpk
8260B	Volatile Organics											
	Dichlorodifluoromethane, Solid*	6.3	U	*	0.94	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Chloromethane, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Vinyl chloride, Solid*	6.3	U		0.93	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Bromomethane, Solid*	6.3	U		3.6	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Chloroethane, Solid*	6.3	U	*	2.0	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Trichlorofluoromethane, Solid*	6.3	U		0.89	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1-Dichloroethene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Carbon disulfide, Solid*	6.3	U		2.5	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Acetone, Solid*	6.3	U		5.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Methylene chloride, Solid*	6.3	U		2.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	trans-1,2-Dichloroethene, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Methyl-tert-butyl-ether (MTBE), Solid*	6.3	U		0.81	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-1
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1-Dichloroethane, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	2,2-Dichloropropane, Solid*	6.3	U		1.6	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	cis-1,2-Dichloroethene, Solid*	6.3	U		1.5	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	2-Butanone (MEK), Solid*	6.3	U		5.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Bromochloromethane, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Chloroform, Solid*	6.3	U		0.78	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1,1-Trichloroethane, Solid*	6.3	U		0.77	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1-Dichloropropene, Solid*	6.3	U		1.0	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Carbon tetrachloride, Solid*	6.3	U		1.0	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Benzene, Solid*	6.3	U		0.83	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2-Dichloroethane, Solid*	6.3	U		0.73	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Trichloroethene, Solid*	6.3	U		0.74	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2-Dichloropropane, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Dibromomethane, Solid*	6.3	U		0.87	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Bromodichloromethane, Solid*	6.3	U		0.86	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	cis-1,3-Dichloropropene, Solid*	6.3	U		0.99	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	4-Methyl-2-pentanone (MIBK), Solid*	6.3	U		3.8	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Toluene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	trans-1,3-Dichloropropene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1,2-Trichloroethane, Solid*	6.3	U		0.89	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Tetrachloroethene, Solid*	6.3	U		0.84	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,3-Dichloropropane, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	2-Hexanone, Solid*	6.3	U		2.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Dibromochloromethane, Solid*	6.3	U		0.87	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2-Dibromoethane (EDB), Solid*	6.3	U		0.96	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Chlorobenzene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1,1,2-Tetrachloroethane, Solid*	6.3	U		0.92	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Ethylbenzene, Solid*	6.3	U		1.4	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	m&p-Xylenes, Solid*	13	U		2.6	13	1.00000	ug/Kg	46269		02/27/02 1922	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS01
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-1
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	o-Xylene, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Styrene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Bromoform, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Isopropylbenzene, Solid*	6.3	U		0.94	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Bromobenzene, Solid*	6.3	U		0.89	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,1,2,2-Tetrachloroethane, Solid*	6.3	U		0.81	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2,3-Trichloropropane, Solid*	6.3	U		1.4	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	n-Propylbenzene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	2-Chlorotoluene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,3,5-Trimethylbenzene, Solid*	6.3	U		0.73	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	4-Chlorotoluene, Solid*	6.3	U		0.97	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	tert-Butylbenzene, Solid*	6.3	U		0.98	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2,4-Trimethylbenzene, Solid*	6.3	U		1.0	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	sec-Butylbenzene, Solid*	6.3	U		1.0	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,3-Dichlorobenzene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	p-Isopropyltoluene, Solid*	6.3	U		0.86	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,4-Dichlorobenzene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	n-Butylbenzene, Solid*	6.3	U		1.1	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2-Dichlorobenzene, Solid*	6.3	U		0.92	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2-Dibromo-3-chloropropane, Solid*	6.3	U		1.4	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2,4-Trichlorobenzene, Solid*	6.3	U		0.99	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Hexachlorobutadiene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	Naphthalene, Solid*	6.3	U		1.3	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct
	1,2,3-Trichlorobenzene, Solid*	6.3	U		1.2	6.3	1.00000	ug/Kg	46269		02/27/02 1922	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination											
	% Solids, Solid	83.3			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Moisture, Solid	16.7			0.10	0.10	1	%	45788		02/25/02 1515	lmb
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	20	U		3.8	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	beta-BHC, Solid*	20	U		3.5	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	delta-BHC, Solid*	20	U		2.6	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	gamma-BHC (Lindane), Solid*	20	U		5.4	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Heptachlor, Solid*	20	U		4.2	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Aldrin, Solid*	20	U		3.1	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Heptachlor epoxide, Solid*	12	J	a	3.3	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endosulfan I, Solid*	20	U		6.3	20	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Dieldrin, Solid*	67	U		8.0	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	4,4'-DDE, Solid*	38	J	a	15	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endrin, Solid*	40	U		10	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endosulfan II, Solid*	40	U		6.6	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	4,4'-DDD, Solid*	40	U		8.5	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endosulfan sulfate, Solid*	11	J	a	6.8	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	4,4'-DDT, Solid*	40	U		8.7	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Methoxychlor, Solid*	200	U		54	200	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	alpha-Chlordane, Solid*	580	U		14	98	100.0000	ug/Kg	46154	D1	03/01/02 2026	kd1
	gamma-Chlordane, Solid*	730	U		18	98	100.0000	ug/Kg	46154	D1	03/01/02 2026	kd1
	Toxaphene, Solid*	390	U		110	390	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endrin aldehyde, Solid*	69	U		7.8	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
	Endrin ketone, Solid*	40	U		6.8	40	20.0000	ug/Kg	46154		03/05/02 0925	kd1
8082	PCB Analysis											
	Aroclor 1016, Solid*	490	U		140	490	50.0000	ug/Kg	46259		03/04/02 1325	mcjk

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date:03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTIGN	UNITS	BATCH	DT	DATE/TIME	TECH
	Aroclor 1221, Solid*	490	U		410	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
	Aroclor 1232, Solid*	490	U		230	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
	Aroclor 1242, Solid*	490	U		330	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
	Aroclor 1248, Solid*	490	U		230	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
	Aroclor 1254, Solid*	4100			120	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
	Aroclor 1260, Solid*	1600			94	490	50.0000	ug/Kg	46259		03/04/02 1325	mgk
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	1.2			0.032	0.20	5	mg/Kg	45768		02/22/02 1713	gok
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	3630			2.8	17.2	1	mg/Kg	45998		02/27/02 1027	lmr
	Antimony, Solid*	42.9			1.2	1.7	1	mg/Kg	45998		02/27/02 1027	lmr
	Arsenic, Solid*	5.6			0.33	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Barium, Solid*	733			0.079	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Beryllium, Solid*	0.34	B		0.039	0.34	1	mg/Kg	45998		02/27/02 1027	lmr
	Cadmium, Solid*	4.6			0.085	0.17	1	mg/Kg	45998		02/27/02 1027	lmr
	Calcium, Solid*	28600			7.9	8.6	1	mg/Kg	45998		02/27/02 1027	lmr
	Chromium, Solid*	589			0.14	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Cobalt, Solid*	10.2			0.17	0.43	1	mg/Kg	45998		02/27/02 1027	lmr
	Copper, Solid*	297			0.32	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Iron, Solid*	22800			2.1	4.3	1	mg/Kg	45998		02/27/02 1027	lmr
	Lead, Solid*	3480			0.33	0.43	1	mg/Kg	45998		02/27/02 1027	lmr
	Magnesium, Solid*	14500			2.7	8.6	1	mg/Kg	45998		02/27/02 1027	lmr
	Manganese, Solid*	3550			0.32	4.3	5	mg/Kg	45998		02/27/02 1148	lmr
	Nickel, Solid*	15.6			0.19	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Potassium, Solid*	368			13.5	42.9	1	mg/Kg	45998		02/27/02 1027	lmr
	Selenium, Solid*	0.86	U		0.39	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Silver, Solid*	0.43	U		0.16	0.43	1	mg/Kg	45998		02/27/02 1027	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8270C	Sodium, Solid*	429	U		225	429	5	mg/Kg	45998		02/27/02 1148	lmr
	Thallium, Solid*	0.86	U		0.44	0.86	1	mg/Kg	45998		02/27/02 1027	lmr
	Vanadium, Solid*	33.9			0.19	0.43	1	mg/Kg	46004		02/27/02 1921	lmr
	Zinc, Solid*	821			0.63	1.7	1	mg/Kg	45998		02/27/02 1027	lmr
	Semivolatile Organics											
	Phenol, Solid*	390	U		98	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Bis(2-chloroethyl)ether, Solid*	390	U		110	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	1,3-Dichlorobenzene, Solid*	390	U		110	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	1,4-Dichlorobenzene, Solid*	390	U		87	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	1,2-Dichlorobenzene, Solid*	390	U		100	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzyl alcohol, Solid*	390	U		120	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	2-Methylphenol (o-cresol), Solid*	390	U		150	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	2,2-dybis (1-chloropropane), Solid*	390	U		200	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	n-Nitroso-di-n-propylamine, Solid*	390	U		120	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Hexachloroethane, Solid*	390	U		92	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	4-Methylphenol (m/p-cresol), Solid*	390	U		140	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	2-Chlorophenol, Solid*	390	U		82	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Nitrobenzene, Solid*	390	U		74	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Bis(2-chloroethoxy)methane, Solid*	390	U		70	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	1,2,4-Trichlorobenzene, Solid*	390	U		58	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzoic acid, Solid*	2000	U		200	2000	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Isophorane, Solid*	230	J		59	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	2,4-Dimethylphenol, Solid*	390	U		260	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Hexachlorobutadiene, Solid*	390	U		82	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Naphthalene, Solid*	390	U		76	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
2,4-Dichlorophenol, Solid*	390	U		67	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk	
4-Chloroaniline, Solid*	390	U		150	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk	
2,4,6-Trichlorophenol, Solid*	390	U		80	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk	

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	UT	DATE/TIME	TECH
	2,4,5-Trichlorophenol, Solid*	2000		U	79	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Hexachlorocyclopentadiene, Solid*	390		U	140	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2-Methylnaphthalene, Solid*	390		U	280	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2-Nitroaniline, Solid*	2000		U	130	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2-Chloronaphthalene, Solid*	390		U	64	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4-Chloro-3-methylphenol, Solid*	390		U	100	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2,6-Dinitrotoluene, Solid*	390		U	92	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2-Nitrophenol, Solid*	390		U	91	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	3-Nitroaniline, Solid*	2000		U	160	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Dimethyl phthalate, Solid*	390		U	89	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2,4-Dinitrophenol, Solid*	2000		U	230	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Acenaphthylene, Solid*	390		U	65	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	2,4-Dinitrotoluene, Solid*	390		U	87	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Acenaphthene, Solid*	390		U	63	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Dibenzofuran, Solid*	390		U	65	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4-Nitrophenol, Solid*	2000		U	430	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Fluorene, Solid*	390		U	120	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4-Nitroaniline, Solid*	2000		U	160	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4-Bromophenyl phenyl ether, Solid*	390		U	110	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Hexachlorobenzene, Solid*	390		U	84	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Diethyl phthalate, Solid*	390		U	110	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4-Chlorophenyl phenyl ether, Solid*	390		U	100	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Pentachlorophenol, Solid*	2000		U	220	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	n-Nitrosodiphenylamine, Solid*	390		U	130	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	4,6-Dinitro-2-methylphenol, Solid*	2000		U	170	2000	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Phenanthrene, Solid*	390		U	82	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Anthracene, Solid*	390		U	86	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Carbazole, Solid*	390		U	100	390	1.00000	ug/Kg	46274		03/04/02 2110	djk
	Di-n-butyl phthalate, Solid*	390		U	85	390	1.00000	ug/Kg	46274		03/04/02 2110	djk

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Benzidine, Solid*	3900	U	*	2300	3900	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Fluoranthene, Solid*	150	J		110	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Pyrene, Solid*	390	U		170	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Butyl benzyl phthalate, Solid*	390	U		140	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzo(a)anthracene, Solid*	100	J		63	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Chrysene, Solid*	170	J		47	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	3,3-Dichlorobenzidine, Solid*	790	U		130	790	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Bis(2-ethylhexyl)phthalate, Solid*	450	U		130	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Di-n-octyl phthalate, Solid*	390	U		310	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzo(b)fluoranthene, Solid*	220	J	M	130	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzo(k)fluoranthene, Solid*	140	J		140	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzo(a)pyrene, Solid*	180	J		69	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Indeno(1,2,3-cd)pyrene, Solid*	390	U		130	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Dibenzo(a,h)anthracene, Solid*	390	U		130	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
	Benzo(ghi)perylene, Solid*	390	U		180	390	1.00000	ug/Kg	46274		03/04/02 2110	dpk
8260B	Volatile Organics											
	Dichlorodifluoromethane, Solid*	6.0	U	*	0.90	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Chloromethane, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Vinyl chloride, Solid*	6.0	U	*	0.89	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Bromomethane, Solid*	6.0	U	*	3.5	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Chloroethane, Solid*	6.0	U		1.9	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Trichlorofluoromethane, Solid*	6.0	U		0.85	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1-Dichloroethene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Carbon disulfide, Solid*	6.0	U		2.4	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Acetone, Solid*	6.0	U		4.9	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Methylene chloride, Solid*	6.0	U		2.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	trans-1,2-Dichloroethene, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Methyl-tert-butyl-ether (MTBE), Solid*	6.0	U		0.77	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1-Dichloroethane, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	2,2-Dichloropropane, Solid*	6.0	U		1.6	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	cis-1,2-Dichloroethene, Solid*	6.0	U		1.4	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	2-Butanone (MEK), Solid*	6.0	U		5.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Bromochloromethane, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Chloroform, Solid*	6.0	U		0.74	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1,1-Trichloroethane, Solid*	6.0	U		0.73	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1-Dichloropropene, Solid*	6.0	U		0.96	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Carbon tetrachloride, Solid*	6.0	U		1.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Benzene, Solid*	6.0	U		0.79	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2-Dichloroethane, Solid*	6.0	U		0.70	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Trichloroethene, Solid*	6.0	U		0.71	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2-Dichloropropane, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Dibromomethane, Solid*	6.0	U		0.83	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Bromodichloromethane, Solid*	6.0	U		0.82	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	cis-1,3-Dichloropropene, Solid*	6.0	U		0.95	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	4-Methyl-2-pentanone (MIBK), Solid*	6.0	U		3.6	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Toluene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	trans-1,3-Dichloropropene, Solid*	6.0	U		1.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1,2-Trichloroethane, Solid*	6.0	U		0.85	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Tetrachloroethene, Solid*	6.0	U		0.80	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,3-Dichloropropane, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	2-Hexanone, Solid*	6.0	U		2.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Dibromochloromethane, Solid*	6.0	U		0.83	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2-Dibromoethane (EDB), Solid*	6.0	U		0.91	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Chlorobenzene, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1,1,2-Tetrachloroethane, Solid*	6.0	U		0.88	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Ethylbenzene, Solid*	6.0	U		1.3	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	m&p-Xylenes, Solid*	12	U		2.5	12	1.00000	ug/Kg	46265		03/03/02 2126	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:20
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-2
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	o-Xylene, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Styrene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Bromoform, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Isopropylbenzene, Solid*	6.0	U		0.90	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Bromobenzene, Solid*	6.0	U		0.85	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,1,2,2-Tetrachloroethane, Solid*	6.0	U		0.77	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2,3-Trichloropropane, Solid*	6.0	U		1.3	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	n-Propylbenzene, Solid*	6.0	U		1.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	2-Chlorotoluene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,3,5-Trimethylbenzene, Solid*	6.0	U		0.70	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	4-Chlorotoluene, Solid*	6.0	U		0.92	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	tert-Butylbenzene, Solid*	6.0	U		0.94	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2,4-Trimethylbenzene, Solid*	6.0	U		0.98	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	sec-Butylbenzene, Solid*	6.0	U		0.97	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,3-Dichlorobenzene, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	p-Isopropyltoluene, Solid*	6.0	U		0.82	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,4-Dichlorobenzene, Solid*	6.0	U		1.1	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	n-Butylbenzene, Solid*	6.0	U		1.0	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2-Dichlorobenzene, Solid*	6.0	U		0.88	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2-Dibromo-3-chloropropane, Solid*	6.0	U		1.3	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2,4-Trichlorobenzene, Solid*	6.0	U		0.95	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Hexachlorobutadiene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	Naphthalene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct
	1,2,3-Trichlorobenzene, Solid*	6.0	U		1.2	6.0	1.00000	ug/Kg	46265		03/03/02 2126	dct

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CNT

ATTN: Linda Korobka

Customer Sample ID: CC-SS03
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:40
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-3
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TEXT
Method	% Solids Determination	77.0			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Solids, Solid	23.0			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Moisture, Solid											
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	2.5			0.070	0.43	10	mg/Kg	45768		02/22/02 1715	gok
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	3620			3.8	23.3	1	mg/Kg	45998		02/27/02 1116	lmr
	Antimony, Solid*	14.5			1.6	2.3	1	mg/Kg	45998		02/27/02 1116	lmr
	Arsenic, Solid*	5.0			0.44	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Barium, Solid*	1030			0.11	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Beryllium, Solid*	0.25		B	0.052	0.47	1	mg/Kg	45998		02/27/02 1116	lmr
	Cadmium, Solid*	7.1			0.12	0.23	1	mg/Kg	45998		02/27/02 1116	lmr
	Calcium, Solid*	26600			10.7	11.6	1	mg/Kg	45998		02/27/02 1116	lmr
	Chromium, Solid*	509			0.19	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Cobalt, Solid*	15.8			0.23	0.58	1	mg/Kg	45998		02/27/02 1116	lmr
	Copper, Solid*	454			0.43	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Iron, Solid*	20000			2.9	5.8	1	mg/Kg	45998		02/27/02 1116	lmr
	Lead, Solid*	2550			0.44	0.58	1	mg/Kg	45998		02/27/02 1116	lmr
	Magnesium, Solid*	12200			3.7	11.6	1	mg/Kg	45998		02/27/02 1116	lmr
	Manganese, Solid*	709			0.087	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Nickel, Solid*	15.0			0.26	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Potassium, Solid*	318			18.3	58.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Selenium, Solid*	1.2		U	0.54	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Silver, Solid*	1.1			0.22	0.58	1	mg/Kg	45998		02/27/02 1116	lmr
	Sodium, Solid*	582		U	305	582	5	mg/Kg	45998		02/27/02 1236	lmr
	Thallium, Solid*	1.2		U	0.59	1.2	1	mg/Kg	45998		02/27/02 1116	lmr
	Vanadium, Solid*	18.9			0.26	0.58	1	mg/Kg	46004		02/27/02 1952	lmr

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS03
Date Sampled.....: 02/20/2002
Time Sampled.....: 12:40
Sample Matrix.....: Soil

Laboratory Sample ID: 208300-3
Date Received.....: 02/21/2002
Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Zinc, Solid*	1620			0.85	2.3	1	mg/Kg	45998		02/27/02 1116	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8260B	Volatile Organics Acetone, High/Med Level*	430			43	150	1.0000	ug/Kg	46273	D1	02/26/02 1635	det
Method	% Solids Determination											
	% Solids, Solid	68.1			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Moisture, Solid	31.9			0.10	0.10	1	%	45788		02/25/02 1515	lmb
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	24	U		4.6	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	beta-BHC, Solid*	24	U		4.3	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	delta-BHC, Solid*	24	U		3.2	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	gamma-BHC (Lindane), Solid*	24	U		6.6	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Heptachlor, Solid*	24	U		5.2	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Aldrin, Solid*	24	U		3.7	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Heptachlor epoxide, Solid*	24	U		4.0	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endosulfan I, Solid*	24	U		7.8	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Dieldrin, Solid*	47	J	a	9.8	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	4,4'-DDE, Solid*	20	J	a	19	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endrin, Solid*	48	J		12	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endosulfan II, Solid*	49	U		8.0	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	4,4'-DDD, Solid*	68			10	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endosulfan sulfate, Solid*	17	J	a	8.3	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	4,4'-DDT, Solid*	93			11	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Methoxychlor, Solid*	96	J	a	66	240	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	alpha-Chlordane, Solid*	100			3.4	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	gamma-Chlordane, Solid*	84			4.3	24	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Toxaphene, Solid*	480	U		130	480	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endrin aldehyde, Solid*	49	U		9.5	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1
	Endrin ketone, Solid*	73			8.3	49	20.0000	ug/Kg	46154		03/05/02 1358	kd1

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8082	PCB Analysis											
	Aroclor 1016, Solid*	120	U		34	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1221, Solid*	120	U		99	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1232, Solid*	120	U		56	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1242, Solid*	120	U		82	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1248, Solid*	120	U		56	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1254, Solid*	1600			29	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
	Aroclor 1260, Solid*	120	U		23	120	10.0000	ug/Kg	46259		03/04/02 1608	mgk
7.3.3.2/9014	Reactivity, Cyanide											
	Reactivity, Cyanide, Solid	2.5	U		1.7	2.5	1	mg/Kg	45840		02/26/02 1642	mpw
7.3.4.2/9034	Reactivity, Sulfide											
	Reactivity, Sulfide, Solid	250	U		130	250	1	mg/Kg	45870		02/25/02 1645	nrp
9045C	pH (Soil)											
	pH, Solid	8.0				0.2	1	pH Units	45722		02/22/02 1737	nrp
	Temperature at Analysis, Solid	21.1				1.0	1	pH Units	45722		02/22/02 1737	nrp
1010	Ignitability (Pensky-Martens Closed-Cup)											
	Ignitability (Flashpoint), Solid	>200					1	degrees F	45944		02/27/02 0808	jmk
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	0.69			0.0079	0.048	1	mg/Kg	45748		02/22/02 1642	gnk
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	8030			4.8	29.2	1	mg/Kg	45948		02/27/02 1122	lmr
	Antimony, Solid*	5.9			2.0	2.9	1	mg/Kg	45948		02/27/02 1122	lmr
	Arsenic, Solid*	19.7			0.56	1.5	1	mg/Kg	45948		02/27/02 1122	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled: 02/20/2002
 Time Sampled: 12:50
 Sample Matrix: Soil

Laboratory Sample ID: 208300-4
 Date Received: 02/21/2002
 Time Received: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Barium, Solid*	730			0.13	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Beryllium, Solid*	0.78			0.066	0.58	1	mg/Kg	45998		02/27/02 1122	lmr
	Cadmium, Solid*	5.3			0.14	0.29	1	mg/Kg	45998		02/27/02 1122	lmr
	Calcium, Solid*	20400			13.4	14.6	1	mg/Kg	45998		02/27/02 1122	lmr
	Chromium, Solid*	180			0.23	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Cobalt, Solid*	22.9			0.29	0.73	1	mg/Kg	45998		02/27/02 1122	lmr
	Copper, Solid*	164			0.54	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Iron, Solid*	78500			3.7	7.3	1	mg/Kg	45998		02/27/02 1122	lmr
	Lead, Solid*	588			0.56	0.73	1	mg/Kg	45998		02/27/02 1122	lmr
	Magnesium, Solid*	10400			4.7	14.6	1	mg/Kg	45998		02/27/02 1122	lmr
	Manganese, Solid*	791			0.11	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Nickel, Solid*	78.4			0.32	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Potassium, Solid*	1400			22.9	73.1	1	mg/Kg	45998		02/27/02 1122	lmr
	Selenium, Solid*	2.8			0.67	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Silver, Solid*	0.73	U		0.28	0.73	1	mg/Kg	45998		02/27/02 1122	lmr
	Sodium, Solid*	2050			76.7	146	1	mg/Kg	45998		02/27/02 1122	lmr
	Thallium, Solid*	1.5	U		0.75	1.5	1	mg/Kg	45998		02/27/02 1122	lmr
	Vanadium, Solid*	23.6			0.32	0.73	1	mg/Kg	46004		02/27/02 1958	lmr
	Zinc, Solid*	782			1.1	2.9	1	mg/Kg	45998		02/27/02 1122	lmr
8270C	Semivolatile Organics											
	Phenol, Solid*	480	U		120	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Bis(2-chloroethyl)ether, Solid*	480	U		130	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	1,3-Dichlorobenzene, Solid*	480	U		130	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	1,4-Dichlorobenzene, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	1,2-Dichlorobenzene, Solid*	480	U		120	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Benzyl alcohol, Solid*	480	U		150	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Methylphenol (o-cresol), Solid*	480	U		180	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,2-oxybis (1-chloropropane), Solid*	480	U		250	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	n-Nitroso-di-n-propylamine, Solid*	480	U		150	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Hexachloroethane, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	4-Methylphenol (m/p-cresol), Solid*	480	U		170	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Chlorophenol, Solid*	480	U		100	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Nitrobenzene, Solid*	480	U		91	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Bis(2-chloroethoxy)methane, Solid*	480	U		85	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	1,2,4-Trichlorobenzene, Solid*	480	U		71	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Benzoic acid, Solid*	2500	U		250	2500	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Isophorone, Solid*	300	J		72	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4-Dimethylphenol, Solid*	480	U	*	320	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Hexachlorobutadiene, Solid*	480	U		100	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Naphthalene, Solid*	480	U		93	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4-Dichlorophenol, Solid*	100	J		82	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	4-Chloroaniline, Solid*	480	U		180	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4,6-Trichlorophenol, Solid*	480	U		98	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4,5-Trichlorophenol, Solid*	2500	U		97	2500	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Hexachlorocyclopentadiene, Solid*	480	U		180	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Methylnaphthalene, Solid*	480	U		340	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Nitroaniline, Solid*	2500	U		150	2500	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Chloronaphthalene, Solid*	480	U		78	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	4-Chloro-3-methylphenol, Solid*	480	U		120	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,6-Dinitrotoluene, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2-Nitrophenol, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	3-Nitroaniline, Solid*	2500	U		200	2500	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Dimethyl phthalate, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4-Dinitrophenol, Solid*	2500	U		280	2500	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Acenaphthylene, Solid*	480	U		80	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	2,4 Dinitrotoluene, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Acenaphthene, Solid*	480	U		77	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Dibenzofuran, Solid*	480	U		80	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	4-Nitrophenol, Solid*	2500	U		530	2500	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Fluorene, Solid*	480	U		140	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	4-Nitroaniline, Solid*	2500	U		200	2500	1.00000	ug/Kg	46274		03/04/02 2011	djk
	4-Bromophenyl phenyl ether, Solid*	480	U		130	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Hexachlorobenzene, Solid*	480	U		100	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Diethyl phthalate, Solid*	480	U		140	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	4-Chlorophenyl phenyl ether, Solid*	480	U		130	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Pentachlorophenol, Solid*	2500	U		270	2500	1.00000	ug/Kg	46274		03/04/02 2011	djk
	n-Nitrosodiphenylamine, Solid*	480	U		160	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	4,6-Dinitro-2-methylphenol, Solid*	2500	U		200	2500	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Phenanthrene, Solid*	140	J		100	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Anthracene, Solid*	480	U		110	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Carbazole, Solid*	480	U		120	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Di-n-butyl phthalate, Solid*	190	J		100	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Benzidine, Solid*	4800	U	*	2800	4800	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Fluoranthene, Solid*	280	J		140	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Pyrene, Solid*	250	J		210	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Butyl benzyl phthalate, Solid*	480	U		170	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Benzo(a)anthracene, Solid*	160	J		77	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Chrysene, Solid*	230	J		58	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	3,3-Dichlorobenzidine, Solid*	970	U		160	970	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Bis(2-ethylhexyl)phthalate, Solid*	2800	U		160	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Di-n-octyl phthalate, Solid*	480	U		380	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Benzo(b)fluoranthene, Solid*	270	J	M	160	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Benzo(k)fluoranthene, Solid*	180	J		170	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Benzo(a)pyrene, Solid*	190	J		84	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Indeno(1,2,3-cd)pyrene, Solid*	480	U		160	480	1.00000	ug/Kg	46274		03/04/02 2011	djk
	Dibenzo(a,h)anthracene, Solid*	480	U		160	480	1.00000	ug/Kg	46274		03/04/02 2011	djk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8260B	Benzo(ghi)perylene, Solid*	480	U		220	480	1.00000	ug/Kg	46274		03/04/02 2011	dpk
	Volatile Organics											
	Dichlorodifluoromethane, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Chloromethane, Solid*	7.3	U		1.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Vinyl chloride, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Bromomethane, Solid*	7.3	U		4.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Chloroethane, Solid*	7.3	U		2.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Trichlorofluoromethane, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1-Dichloroethene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Carbon disulfide, Solid*	4.7	J	a*	2.9	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Methylene chloride, Solid*	7.3	U		2.6	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	trans-1,2-Dichloroethene, Solid*	7.3	U		1.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Methyl-tert-butyl-ether (MTBE), Solid*	7.3	U		0.94	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1-Dichloroethane, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	2,2-Dichloropropane, Solid*	7.3	U		1.9	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	cis-1,2-Dichloroethene, Solid*	7.3	U		1.8	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	2-Butanone (MEK), Solid*	240	U		6.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Bromochloromethane, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Chloroform, Solid*	7.3	U		0.91	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1,1-Trichloroethane, Solid*	7.3	U		0.90	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1-Dichloropropene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Carbon tetrachloride, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Benzene, Solid*	7.3	U		0.97	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
1,2-Dichloroethane, Solid*	7.3	U		0.85	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct	
Trichloroethene, Solid*	7.3	U		0.87	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct	
1,2-Dichloropropane, Solid*	7.3	U		1.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct	
Dibromomethane, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct	
Bromodichloromethane, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct	

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	cis-1,3-Dichloropropene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	4-Methyl-2-pentanone (MIBK), Solid*	7.3	U		4.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Toluene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	trans-1,3-Dichloropropene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1,2-Trichloroethane, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Tetrachloroethene, Solid*	7.3	U		0.98	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,3-Dichloropropane, Solid*	7.3	U		1.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	2-Hexanone, Solid*	7.3	U		2.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Dibromochloromethane, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2-Dibromoethane (EDB), Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Chlorobenzene, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1,1,2-Tetrachloroethane, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Ethylbenzene, Solid*	7.3	U		1.6	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	m&p-Xylenes, Solid*	15	U		3.1	15	1.00000	ug/Kg	46271		02/22/02 1524	dct
	o-Xylene, Solid*	7.3	U		1.4	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Styrene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Bromoform, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Isopropylbenzene, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Bromobenzene, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,1,1,2-Tetrachloroethane, Solid*	7.3	U		0.94	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2,3-Trichloropropane, Solid*	7.3	U		1.6	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	n-Propylbenzene, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	2-Chlorotoluene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,3,5-Trimethylbenzene, Solid*	7.3	U		0.85	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	4-Chlorotoluene, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	tert-Butylbenzene, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2,4-Trimethylbenzene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	sec-Butylbenzene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,3-Dichlorobenzene, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	p-Isopropyltoluene, Solid*	7.3	U		1.0	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,4-Dichlorobenzene, Solid*	7.3	U		1.3	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	n-Butylbenzene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2-Dichlorobenzene, Solid*	7.3	U		1.1	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2-Dibromo-3-chloropropane, Solid*	7.3	U		1.6	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2,4-Trichlorobenzene, Solid*	7.3	U		1.2	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Hexachlorobutadiene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	Naphthalene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
	1,2,3-Trichlorobenzene, Solid*	7.3	U		1.5	7.3	1.00000	ug/Kg	46271		02/22/02 1524	dct
8081A	Organochlorine Pesticide Analysis											
	gamma-BHC (Lindane), TCLP Leach	2.5	U		2.5	2.5	1.00000	ug/L	46095		02/28/02 1803	kdl
	Heptachlor, TCLP Leach	2.5	U		2.5	2.5	1.00000	ug/L	46095		02/28/02 1803	kdl
	Heptachlor epoxide, TCLP Leach	2.5	U		2.5	2.5	1.00000	ug/L	46095		02/28/02 1803	kdl
	Endrin, TCLP Leach	5.0	U		5.0	5.0	1.00000	ug/L	46095		02/28/02 1803	kdl
	Methoxychlor, TCLP Leach	25	U		25	25	1.00000	ug/L	46095		02/28/02 1803	kdl
	Toxaphene, TCLP Leach	50	U		50	50	1.00000	ug/L	46095		02/28/02 1803	kdl
	Chlordane, TCLP Leach	10	U		10	10	1.00000	ug/L	46095		02/28/02 1803	kdl
7470A	Leachable, Mercury (CVAA)											
	Mercury, TCLP Leach	0.0020	U		0.0020	0.0020	1	mg/L	45876		02/26/02 1506	gnk
6010B	Leachable, Metals Analysis (ICAP)											
	Arsenic, TCLP Leach	0.100	U		0.0100	0.100	1	mg/L	46005		02/27/02 2112	lmr
	Barium, TCLP Leach	1.01			0.0100	1.00	1	mg/L	46005		02/27/02 2112	lmr
	Cadmium, TCLP Leach	0.0368	B		0.0020	0.0500	1	mg/L	46005		02/27/02 2112	lmr
	Chromium, TCLP Leach	0.0273	B		0.0100	0.0500	1	mg/L	46005		02/27/02 2112	lmr
	Lead, TCLP Leach	2.36			0.0050	0.0500	1	mg/L	46005		02/27/02 2112	lmr
	Selenium, TCLP Leach	0.0153	B		0.0100	0.100	1	mg/L	46005		02/27/02 2112	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATIN: Linda Korobka

Customer Sample ID: CC-SS04
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 12:50
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-4
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Silver, TCLP Leach	0.0500	U		0.0050	0.0500	1	mg/L	46005		02/27/02 2112	lmr
8270C	Semivolatile Organics											
	Pyridine, TCLP Leach	200	U		200	200	1.00000	ug/L	46272		03/01/02 1757	dpk
	1,4-Dichlorobenzene, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	2-Methylphenol (o-cresol), TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	Hexachloroethane, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	4-Methylphenol (m/p-cresol), TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	Nitrobenzene, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	Hexachlorobutadiene, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	2,4,6-Trichlorophenol, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	2,4,5-Trichlorophenol, TCLP Leach	500	U		500	500	1.00000	ug/L	46272		03/01/02 1757	dpk
	2,4-Dinitrotoluene, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	Hexachlorobenzene, TCLP Leach	100	U		100	100	1.00000	ug/L	46272		03/01/02 1757	dpk
	Pentachlorophenol, TCLP Leach	500	U		500	500	1.00000	ug/L	46272		03/01/02 1757	dpk
8260B	Volatile Organics											
	Vinyl chloride, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	1,1-Dichloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	2-Butanone (MEK), TCLP Leach	730		B	100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Chloroform, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Carbon tetrachloride, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Benzene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	1,2-Dichloroethane, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Trichloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Tetrachloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct
	Chlorobenzene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1522	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATIN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	% Solids Determination	78.2			0.10	0.10	1	%	45788		02/25/02 1515	lmb
	% Solids, Solid											
	% Moisture, Solid	21.8			0.10	0.10	1	%	45788		02/25/02 1515	lmb
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	10	U		2.0	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	beta-BHC, Solid*	10	U		1.9	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	delta-BHC, Solid*	10	U		1.4	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	gamma-BHC (Lindane), Solid*	5.9	J	a	2.9	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Heptachlor, Solid*	10	U		2.2	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Aldrin, Solid*	10	U		1.6	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Heptachlor epoxide, Solid*	10	U		1.7	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endosulfan I, Solid*	10	U		3.4	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Dieldrin, Solid*	34	U		4.2	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	4,4'-DDE, Solid*	31	U		8.1	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endrin, Solid*	21	U		5.4	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endosulfan II, Solid*	21	U		3.5	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	4,4'-DDD, Solid*	9.9	J	a	4.5	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endosulfan sulfate, Solid*	21	U		3.6	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	4,4'-DDT, Solid*	21	U		4.6	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Methoxychlor, Solid*	100	U		29	100	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	alpha-Chlordane, Solid*	21	U		1.5	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	gamma-Chlordane, Solid*	43	U		1.9	10	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Toxaphene, Solid*	210	U		57	210	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endrin aldehyde, Solid*	60	U		4.1	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
	Endrin ketone, Solid*	21	U		3.6	21	10.0000	ug/Kg	46154		03/05/02 1449	kd1
8082	PCB Analysis											
	Aroclor 1016, Solid*	100	U		30	100	10.0000	ug/Kg	46259		03/01/02 1756	mjk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Aroclor 1221, Solid*	100	U		86	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
	Aroclor 1232, Solid*	100	U		49	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
	Aroclor 1242, Solid*	100	U		71	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
	Aroclor 1248, Solid*	100	U		49	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
	Aroclor 1254, Solid*	2100			25	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
	Aroclor 1260, Solid*	660			20	100	10.0000	ug/Kg	46259		03/01/02 1756	mgk
7471A	Mercury (CVAA) Solids Mercury, Solid*	1.0			0.0069	0.042	1	mg/Kg	45768		02/22/02 1645	gok
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	4890			3.4	20.7	1	mg/Kg	45998		02/27/02 1128	lmr
	Antimony, Solid*	10.1			1.4	2.1	1	mg/Kg	45998		02/27/02 1128	lmr
	Arsenic, Solid*	9.0			0.39	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Barium, Solid*	647			0.095	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Beryllium, Solid*	0.21	B		0.047	0.41	1	mg/Kg	45998		02/27/02 1128	lmr
	Cadmium, Solid*	44.8			0.10	0.21	1	mg/Kg	45998		02/27/02 1128	lmr
	Calcium, Solid*	58500			9.5	10.3	1	mg/Kg	45998		02/27/02 1128	lmr
	Chromium, Solid*	680			0.17	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Cobalt, Solid*	15.5			0.21	0.52	1	mg/Kg	45998		02/27/02 1128	lmr
	Copper, Solid*	521			0.38	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Iron, Solid*	72600			12.9	25.8	5	mg/Kg	45998		02/27/02 1242	lmr
	Lead, Solid*	1410			0.39	0.52	1	mg/Kg	45998		02/27/02 1128	lmr
	Magnesium, Solid*	14100			3.3	10.3	1	mg/Kg	45998		02/27/02 1128	lmr
	Manganese, Solid*	7660			0.39	5.2	5	mg/Kg	45998		02/27/02 1242	lmr
	Nickel, Solid*	51.0			0.23	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Potassium, Solid*	511			16.2	51.7	1	mg/Kg	45998		02/27/02 1128	lmr
	Selenium, Solid*	13.6			0.48	1.0	1	mg/Kg	45998		02/27/02 1128	lmr
	Silver, Solid*	0.52	U		0.20	0.52	1	mg/Kg	45998		02/27/02 1128	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8270C	Sodium, Solid*	269			54.3	103	1	mg/Kg	45998		02/27/02 1128	lmc
	Thallium, Solid*	1.0	U		0.53	1.0	1	mg/Kg	45998		02/27/02 1128	lmc
	Vanadium, Solid*	163			0.23	0.52	1	mg/Kg	46004		02/27/02 2017	lmc
	Zinc, Solid*	997			0.75	2.1	1	mg/Kg	45998		02/27/02 1128	lmc
	Semivolatiles Organics											
	Phenol, Solid*	1700	U		420	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Bis(2-chloroethyl)ether, Solid*	1700	U		460	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	1,3-Dichlorobenzene, Solid*	1700	U		470	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	1,4-Dichlorobenzene, Solid*	1700	U		370	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	1,2-Dichlorobenzene, Solid*	1700	U		430	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Benzyl alcohol, Solid*	1700	U		520	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2-Methylphenol (o-cresol), Solid*	1700	U		630	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2,2-oxybis (1-chloropropane), Solid*	1700	U		870	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	n-Nitroso-di-n-propylamine, Solid*	1700	U		510	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Hexachloroethane, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	4-Methylphenol (m/p-cresol), Solid*	1700	U		600	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2-Chlorophenol, Solid*	1700	U		350	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Nitrobenzene, Solid*	1700	U		320	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Bis(2-chloroethoxy)methane, Solid*	1700	U		300	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	1,2,4-Trichlorobenzene, Solid*	1700	U		250	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Benzoic acid, Solid*	8600	U		860	8600	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Isophorone, Solid*	3100	U		250	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2,4-Dimethylphenol, Solid*	1700	U	*	1100	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Hexachlorobutadiene, Solid*	1700	U		350	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	Naphthalene, Solid*	1700	U		320	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2,4-Dichlorophenol, Solid*	1700	U		290	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	4-Chloroaniline, Solid*	1700	U		640	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk
	2,4,6-Trichlorophenol, Solid*	1700	U		340	1700	4.00000	ug/Kg	46274		03/04/02 1912	djk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,4,5-Trichlorophenol, Solid*	8600	U		340	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Hexachlorocyclopentadiene, Solid*	1700	U		610	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2-Methylnaphthalene, Solid*	1700	U		1200	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2-Nitroaniline, Solid*	8600	U		540	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2-Chloronaphthalene, Solid*	1700	U		270	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4-Chloro-3-methylphenol, Solid*	1700	U		430	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2,6-Dinitrotoluene, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2-Nitrophenol, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	3-Nitroaniline, Solid*	8600	U		700	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Dimethyl phthalate, Solid*	1700	U		380	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2,4-Dinitrophenol, Solid*	8600	U		990	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Acenaphthylene, Solid*	1700	U		280	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	2,4-Dinitrotoluene, Solid*	1700	U		370	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Acenaphthene, Solid*	1700	U		270	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Dibenzofuran, Solid*	1700	U		280	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4-Nitrophenol, Solid*	8600	U		1800	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Fluorene, Solid*	1700	U		490	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4-Nitroaniline, Solid*	8600	U		680	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4-Bromophenyl phenyl ether, Solid*	1700	U		460	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Hexachlorobenzene, Solid*	1700	U		360	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Diethyl phthalate, Solid*	1700	U		480	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4-Chlorophenyl phenyl ether, Solid*	1700	U		440	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Pentachlorophenol, Solid*	8600	U		930	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	n-Nitrosodiphenylamine, Solid*	1700	U		540	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	4,6-Dinitro-2-methylphenol, Solid*	8600	U		710	8600	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Phenanthrene, Solid*	1700	U		350	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Anthracene, Solid*	1700	U		370	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Carbazole, Solid*	1700	U		430	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Di-n-butyl phthalate, Solid*	720	J		360	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Benzidine, Solid*	17000	U	*	9900	17000	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Fluoranthene, Solid*	1700	U		470	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Pyrene, Solid*	1700	U		720	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Butyl benzyl phthalate, Solid*	1300	J		580	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Benzo(a)anthracene, Solid*	1700	U		270	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Chrysene, Solid*	220	J		200	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	3,3-Dichlorobenzidine, Solid*	3400	U		570	3400	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Bis(2-ethylhexyl)phthalate, Solid*	7300	U		570	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Di-n-octyl phthalate, Solid*	1700	U		1300	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Benzo(b)fluoranthene, Solid*	1700	U		540	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Benzo(k)fluoranthene, Solid*	1700	U		580	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Benzo(a)pyrene, Solid*	1700	U		290	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Indeno(1,2,3-cd)pyrene, Solid*	1700	U		560	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Dibenzo(a,h)anthracene, Solid*	1700	U		560	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
	Benzo(ghi)perylene, Solid*	1700	U		770	1700	4.00000	ug/Kg	46274		03/04/02 1912	dpk
8260B	Volatiles Organics											
	Dichlorodifluoromethane, Solid*	6.4	U		0.96	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Chloromethane, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Vinyl chloride, Solid*	6.4	U		0.95	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Bromomethane, Solid*	6.4	U		3.7	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Chloroethane, Solid*	6.4	U		2.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Trichlorofluoromethane, Solid*	6.4	U		0.91	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1-Dichloroethene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Carbon disulfide, Solid*	6.4	U	*	2.6	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Acetone, Solid*	6.4	U		5.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Methylene chloride, Solid*	6.4	U		2.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	trans-1,2-Dichloroethene, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Methyl-tert-butyl-ether (MTBE), Solid*	6.4	U		0.82	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1-Dichloroethane, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	2,2-Dichloropropane, Solid*	6.4	U		1.7	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	cis-1,2-Dichloroethene, Solid*	6.4	U		1.5	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	2-Butanone (MEK), Solid*	6.4	U		5.4	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Bromochloromethane, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Chloroform, Solid*	6.4	U		0.79	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1,1-Trichloroethane, Solid*	6.4	U		0.78	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1-Dichloropropene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Carbon tetrachloride, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Benzene, Solid*	6.4	U		0.84	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2-Dichloroethane, Solid*	6.4	U		0.74	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Trichloroethene, Solid*	6.4	U		0.75	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2-Dichloropropane, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Dibromomethane, Solid*	6.4	U		0.88	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Bromodichloromethane, Solid*	6.4	U		0.87	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	cis-1,3-Dichloropropene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	4-Methyl-2-pentanone (MIBK), Solid*	6.4	U		3.8	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Toluene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	trans-1,3-Dichloropropene, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1,2-Trichloroethane, Solid*	6.4	U		0.91	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Tetrachloroethene, Solid*	6.4	U		0.86	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,3-Dichloropropane, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	2-Hexanone, Solid*	6.4	U		2.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Dibromochloromethane, Solid*	6.4	U		0.88	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2-Dibromoethane (EDB), Solid*	6.4	U		0.97	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Chlorobenzene, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1,1,2-Tetrachloroethane, Solid*	6.4	U		0.93	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Ethylbenzene, Solid*	6.4	U		1.4	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	m&p-Xylenes, Solid*	13	U		2.7	13	1.00000	ug/Kg	46271		02/22/02 1602	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALLMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-5
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	o-Xylene, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Styrene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Bromofom, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Isopropylbenzene, Solid*	6.4	U		0.96	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Bromobenzene, Solid*	6.4	U		0.91	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,1,2,2-Tetrachloroethane, Solid*	6.4	U		0.82	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2,3-Trichloropropane, Solid*	6.4	U		1.4	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	n-Propylbenzene, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	2-Chlorotoluene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,3,5-Trimethylbenzene, Solid*	6.4	U		0.74	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	4-Chlorotoluene, Solid*	6.4	U		0.98	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	tert-Butylbenzene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2,4-Trimethylbenzene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	sec-Butylbenzene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,3-Dichlorobenzene, Solid*	6.4	U		1.2	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	p-Isopropyltoluene, Solid*	6.4	U		0.87	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,4-Dichlorobenzene, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	n-Butylbenzene, Solid*	6.4	U		1.1	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2-Dichlorobenzene, Solid*	6.4	U		0.93	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2-Dibromo-3-chloropropane, Solid*	6.4	U		1.4	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2,4-Trichlorobenzene, Solid*	6.4	U		1.0	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Hexachlorobutadiene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	Naphthalene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct
	1,2,3-Trichlorobenzene, Solid*	6.4	U		1.3	6.4	1.00000	ug/Kg	46271		02/22/02 1602	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
Method	‡ Solids Determination											
	‡ Solids, Solid	74.6			0.10	0.10	1	‡	45788		02/25/02 1515	lmb
	‡ Moisture, Solid	25.4			0.10	0.10	1	‡	45788		02/25/02 1515	lmb
8081A	Organochlorine Pesticide Analysis											
	alpha-BHC, Solid*	11	U		2.1	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	beta-BHC, Solid*	11	U		2.0	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	delta-BHC, Solid*	11	U		1.5	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	gamma-BHC (Lindane), Solid*	11	U		3.1	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Heptachlor, Solid*	11	U		2.4	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Aldrin, Solid*	11	U		1.7	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Heptachlor epoxide, Solid*	11	U		1.9	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endosulfan I, Solid*	11	U		3.6	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Dieldrin, Solid*	38	U		4.5	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	4,4'-DDE, Solid*	30	U		8.7	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endrin, Solid*	23	U		5.7	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endosulfan II, Solid*	23	U		3.7	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	4,4'-DDD, Solid*	23	U		4.8	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endosulfan sulfate, Solid*	7.5	J	a	3.9	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	4,4'-DDT, Solid*	23	U		4.9	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Methoxychlor, Solid*	110	U		31	110	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	alpha-Chlordane, Solid*	22	U		1.6	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	gamma-Chlordane, Solid*	49	U		2.0	11	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Toxaphene, Solid*	220	U		61	220	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endrin aldehyde, Solid*	23	J		4.4	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
	Endrin ketone, Solid*	23	U		3.9	23	10.0000	ug/Kg	46154		03/05/02 1539	kd1
8082	PCB Analysis											
	Aroclor 1016, Solid*	110	U		32	110	10.0000	ug/Kg	46259		03/01/02 1901	mjk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Aroclor 1221, Solid*	110	U		92	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
	Aroclor 1232, Solid*	110	U		52	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
	Aroclor 1242, Solid*	110	U		76	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
	Aroclor 1248, Solid*	110	U		52	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
	Aroclor 1254, Solid*	1900			27	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
	Aroclor 1260, Solid*	650			21	110	10.0000	ug/Kg	46259		03/01/02 1901	mgk
7471A	Mercury (CVAA) Solids											
	Mercury, Solid*	1.3			0.014	0.088	2	mg/Kg	45768		02/22/02 1706	gok
6010B	Metals Analysis (ICAP Trace)											
	Aluminum, Solid*	5120			3.3	20.2	1	mg/Kg	45998		02/27/02 1134	lmr
	Antimony, Solid*	7.3			1.4	2.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Arsenic, Solid*	7.4			0.38	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Barium, Solid*	280			0.093	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Beryllium, Solid*	0.18	B		0.045	0.40	1	mg/Kg	45998		02/27/02 1134	lmr
	Cadmium, Solid*	20.8			0.10	0.20	1	mg/Kg	45998		02/27/02 1134	lmr
	Calcium, Solid*	96600			92.7	101	10	mg/Kg	45998		02/27/02 1248	lmr
	Chromium, Solid*	585			0.16	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Cobalt, Solid*	13.5			0.20	0.50	1	mg/Kg	45998		02/27/02 1134	lmr
	Copper, Solid*	433			0.37	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Iron, Solid*	72300			25.2	50.4	10	mg/Kg	45998		02/27/02 1248	lmr
	Lead, Solid*	986			0.38	0.50	1	mg/Kg	45998		02/27/02 1134	lmr
	Magnesium, Solid*	18500			3.2	10.1	1	mg/Kg	45998		02/27/02 1134	lmr
	Manganese, Solid*	12500			0.76	10.1	10	mg/Kg	45998		02/27/02 1248	lmr
	Nickel, Solid*	25.3			0.22	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Potassium, Solid*	531			15.8	50.4	1	mg/Kg	45998		02/27/02 1134	lmr
	Selenium, Solid*	5.8			0.46	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Silver, Solid*	0.50	U		0.19	0.50	1	mg/Kg	45998		02/27/02 1134	lmr

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8270C	Sodium, Solid*	328			52.9	101	1	mg/Kg	45998		02/27/02 1134	lmr
	Thallium, Solid*	1.9			0.51	1.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Vanadium, Solid*	291			0.22	0.50	1	mg/Kg	46004		02/27/02 2023	lmr
	Zinc, Solid*	944			0.74	2.0	1	mg/Kg	45998		02/27/02 1134	lmr
	Semivolatile Organics											
	Phenol, Solid*	1700	U		440	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Bis(2-chloroethyl)ether, Solid*	1700	U		480	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	1,3-Dichlorobenzene, Solid*	1700	U		490	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	1,4-Dichlorobenzene, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	1,2-Dichlorobenzene, Solid*	1700	U		450	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzyl alcohol, Solid*	1700	U		540	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Methylphenol (o-cresol), Solid*	1700	U		650	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,2-oxybis (1-chloropropane), Solid*	1700	U		900	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	n-Nitroso-di-n-propylamine, Solid*	1700	U		530	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Hexachloroethane, Solid*	1700	U		410	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Methylphenol (m/p-cresol), Solid*	1700	U		620	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Chlorophenol, Solid*	1700	U		360	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Nitrobenzene, Solid*	1700	U		330	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Bis(2-chloroethoxy)methane, Solid*	1700	U		310	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	1,2,4-Trichlorobenzene, Solid*	1700	U		260	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzoic acid, Solid*	8900	U		900	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Isophorane, Solid*	4100	U		260	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,4-Dimethylphenol, Solid*	1700	U	*	1200	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Hexachlorobutadiene, Solid*	1700	U		360	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Naphthalene, Solid*	1700	U		340	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,4-Dichlorophenol, Solid*	1700	U		300	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Chloroaniline, Solid*	1700	U		670	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
2,4,6-Trichlorophenol, Solid*	1700	U		360	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk	

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Kozobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	2,4,5-Trichlorophenol, Solid*	8900	U		350	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Hexachlorocyclopentadiene, Solid*	1700	U		640	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Methylnaphthalene, Solid*	1700	U		1300	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Nitroaniline, Solid*	8900	U		560	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Chloronaphthalene, Solid*	1700	U		280	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Chloro-3-methylphenol, Solid*	1700	U		450	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,6-Dinitrotoluene, Solid*	1700	U		410	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2-Nitrophenol, Solid*	1700	U		400	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	3-Nitroaniline, Solid*	8900	U		730	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Dimethyl phthalate, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,4-Dinitrophenol, Solid*	8900	U		1000	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Acenaphthylene, Solid*	1700	U		290	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	2,4-Dinitrotoluene, Solid*	1700	U		390	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Acenaphthene, Solid*	1700	U		280	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Dibenzofuran, Solid*	1700	U		290	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Nitrophenol, Solid*	8900	U		1900	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Fluorene, Solid*	1700	U		510	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Nitroaniline, Solid*	8900	U		710	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Bromophenyl phenyl ether, Solid*	1700	U		480	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Hexachlorobenzene, Solid*	1700	U		370	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Diethyl phthalate, Solid*	1700	U		500	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4-Chlorophenyl phenyl ether, Solid*	1700	U		460	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Pentachlorophenol, Solid*	8900	U		970	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	n-Nitrosodiphenylamine, Solid*	1700	U		570	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	4,6-Dinitro-2-methylphenol, Solid*	8900	U		740	8900	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Phenanthrene, Solid*	1700	U		360	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Anthracene, Solid*	1700	U		380	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Carbazole, Solid*	1700	U		450	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Di-n-butyl phthalate, Solid*	800	J		380	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Benzidine, Solid*	17000	U	*	10000	17000	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Fluoranthene, Solid*	1700	U		490	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Pyrene, Solid*	1700	U		750	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Butyl benzyl phthalate, Solid*	1000	J		600	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzo(a)anthracene, Solid*	1700	U		280	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Chrysene, Solid*	1700	U		210	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	3,3-Dichlorobenzidine, Solid*	3500	U		600	3500	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Bis(2-ethylhexyl)phthalate, Solid*	8200	U		590	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Di-n-octyl phthalate, Solid*	1700	U		1400	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzo(b)fluoranthene, Solid*	1700	U		570	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzo(k)fluoranthene, Solid*	1700	U		600	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzo(a)pyrene, Solid*	1700	U		300	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Indeno(1,2,3-cd)pyrene, Solid*	1700	U		590	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Dibenzo(a,h)anthracene, Solid*	1700	U		590	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
	Benzo(ghi)perylene, Solid*	1700	U		800	1700	4.00000	ug/Kg	46274		03/04/02 1941	dpk
8260B	Volatile Organics											
	Dichlorodifluoromethane, Solid*	6.7	U	*	1.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Chloromethane, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Vinyl chloride, Solid*	6.7	U		0.99	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Bromomethane, Solid*	6.7	U		3.9	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Chloroethane, Solid*	6.7	U	*	2.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Trichlorofluoromethane, Solid*	6.7	U		0.95	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1-Dichloroethene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Carbon disulfide, Solid*	6.7	U		2.7	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Acetone, Solid*	6.7	U		5.5	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Methylene chloride, Solid*	6.7	U		2.4	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	trans-1,2-Dichloroethene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Methyl-tert-butyl-ether (MTBE), Solid*	6.7	U		0.86	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled: 02/20/2002
 Time Sampled: 13:10
 Sample Matrix: Soil

Laboratory Sample ID: 208300-6
 Date Received: 02/21/2002
 Time Received: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	1,1-Dichloroethane, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	2,2-Dichloropropane, Solid*	6.7	U		1.7	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	cis-1,2-Dichloroethene, Solid*	6.7	U		1.6	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	2-Butanone (MEK), Solid*	6.7	U		5.6	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Bromochloromethane, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Chloroform, Solid*	6.7	U		0.83	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1,1-Trichloroethane, Solid*	6.7	U		0.82	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1-Dichloropropene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Carbon tetrachloride, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Benzene, Solid*	6.7	U		0.88	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2-Dichloroethane, Solid*	6.7	U		0.78	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Trichloroethene, Solid*	6.7	U		0.79	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2-Dichloropropane, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Dibromomethane, Solid*	6.7	U		0.92	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Bromodichloromethane, Solid*	6.7	U		0.91	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	cis-1,3-Dichloropropene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	4-Methyl-2-pentanone (MIBK), Solid*	6.7	U		4.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Toluene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	trans-1,3-Dichloropropene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1,2-Trichloroethane, Solid*	6.7	U		0.95	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Tetrachloroethene, Solid*	6.7	U		0.90	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,3-Dichloropropane, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	2-Hexanone, Solid*	6.7	U		2.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Dibromochloromethane, Solid*	6.7	U		0.92	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2-Dibromoethane (EDB), Solid*	6.7	U		1.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Chlorobenzene, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1,1,2-Tetrachloroethane, Solid*	6.7	U		0.98	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Ethylbenzene, Solid*	6.7	U		1.5	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	m&p-Xylenes, Solid*	13	U		2.8	13	1.00000	ug/Kg	46267		03/01/02 1550	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS05DP
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 13:10
 Sample Matrix.....: Soil

Laboratory Sample ID: 208300-6
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	o-Xylene, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Styrene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Bromoform, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Isopropylbenzene, Solid*	6.7	U		1.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Bromobenzene, Solid*	6.7	U		0.95	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,1,2,2-Tetrachloroethane, Solid*	6.7	U		0.86	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2,3-Trichloropropane, Solid*	6.7	U		1.5	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	n-Propylbenzene, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	2-Chlorotoluene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,3,5-Trimethylbenzene, Solid*	6.7	U		0.78	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	4-Chlorotoluene, Solid*	6.7	U		1.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	tert-Butylbenzene, Solid*	6.7	U		1.0	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2,4-Trimethylbenzene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	sec-Butylbenzene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,3-Dichlorobenzene, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	p-Isopropyltoluene, Solid*	6.7	U		0.91	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,4-Dichlorobenzene, Solid*	6.7	U		1.2	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	n-Butylbenzene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2-Dichlorobenzene, Solid*	6.7	U		0.98	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2-Dibromo-3-chloropropane, Solid*	6.7	U		1.5	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2,4-Trichlorobenzene, Solid*	6.7	U		1.1	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Hexachlorobutadiene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	Naphthalene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct
	1,2,3-Trichlorobenzene, Solid*	6.7	U		1.3	6.7	1.00000	ug/Kg	46267		03/01/02 1550	dct

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 208300

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-WC14
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 16:45
 Sample Matrix.....: Solid

Laboratory Sample ID: 208300-7
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
7.3.3.2/9014	Reactivity, Cyanide Reactivity, Cyanide, Solid	2.4		U	1.7	2.4	1	mg/Kg	45890		02/26/02 1642	mpw
7.3.4.2/9034	Reactivity, Sulfide Reactivity, Sulfide, Solid	220		U	120	220	1	mg/Kg	45870		02/25/02 1700	nrp
9045C	pH (Soil) pH, Solid	3.8				0.2	1	pH Units	45723		02/22/02 1744	nrp
	Temperature at Analysis, Solid	21.4				1.0	1	pH Units	45723		02/22/02 1744	nrp
1010	Ignitability (Pensky-Martens Closed-Cup) Ignitability (Flashpoint), Solid	80					1	degrees F	45878		02/26/02 1500	jmk
9095A	Paint Filter Test Paint Filter Test, Solid	0					1	mL/100g	45709		02/23/02 0730	jmk
8081A	Organochlorine Pesticide Analysis gamma-BHC (Lindane), TCLP Leach	2.5		U	2.5	2.5	1.00000	ug/L	46095		02/28/02 1919	kd1
	Heptachlor, TCLP Leach	2.5		U	2.5	2.5	1.00000	ug/L	46095		02/28/02 1919	kd1
	Heptachlor epoxide, TCLP Leach	2.5		U	2.5	2.5	1.00000	ug/L	46095		02/28/02 1919	kd1
	Endrin, TCLP Leach	5.0		U	5.0	5.0	1.00000	ug/L	46095		02/28/02 1919	kd1
	Methoxychlor, TCLP Leach	25		U	25	25	1.00000	ug/L	46095		02/28/02 1919	kd1
	Toxaphene, TCLP Leach	50		U	50	50	1.00000	ug/L	46095		02/28/02 1919	kd1
	Chlordane, TCLP Leach	10		U	10	10	1.00000	ug/L	46095		02/28/02 1919	kd1
7470A	Leachable, Mercury (CVAA) Mercury, TCLP Leach	0.0020		U	0.0020	0.0020	1	mg/L	45876		02/26/02 1513	gok
6010B	Leachable, Metals Analysis (ICAP) Arsenic, TCLP Leach	0.100		U	0.0100	0.100	1	mg/L	46005		02/27/02 2137	lmr

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date: 03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-WC14
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 16:45
 Sample Matrix.....: Solid

Laboratory Sample ID: 208300-7
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Barium, TCLP Leach	0.137	B		0.0100	1.00	1	mg/L	46005		02/27/02 2137	lmr
	Cadmium, TCLP Leach	0.0500	U		0.0020	0.0500	1	mg/L	46005		02/27/02 2137	lmr
	Chromium, TCLP Leach	0.0500	U		0.0100	0.0500	1	mg/L	46005		02/27/02 2137	lmr
	Lead, TCLP Leach	0.0500	U		0.0050	0.0500	1	mg/L	46005		02/27/02 2137	lmr
	Selenium, TCLP Leach	0.100	U		0.0100	0.100	1	mg/L	46005		02/27/02 2137	lmr
	Silver, TCLP Leach	0.0500	U		0.0050	0.0500	1	mg/L	46005		02/27/02 2137	lmr
8270C	Semivolatile Organics											
	Pyridine, TCLP Leach	2000	U		2000	2000	10.00000	ug/L	46272		03/01/02 1956	dpk
	1,4-Dichlorobenzene, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	2-Methylphenol (o-cresol), TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	Hexachloroethane, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	4-Methylphenol (m/p-cresol), TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	Nitrobenzene, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	Hexachlorobutadiene, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	2,4,6-Trichlorophenol, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	2,4,5-Trichlorophenol, TCLP Leach	5000	U		5000	5000	10.00000	ug/L	46272		03/01/02 1956	dpk
	2,4-Dinitrotoluene, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	Hexachlorobenzene, TCLP Leach	1000	U		1000	1000	10.00000	ug/L	46272		03/01/02 1956	dpk
	Pentachlorophenol, TCLP Leach	5000	U		5000	5000	10.00000	ug/L	46272		03/01/02 1956	dpk
8260B	Volatile Organics											
	Vinyl chloride, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	1,1-Dichloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	2-Butanone (MEK), TCLP Leach	97000	U	*	12000	12000	125.00	ug/L	46277	DI	03/04/02 1816	dct
	Chloroform, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	Carbon tetrachloride, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	Benzene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	1,2-Dichloroethane, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct

* In Description = Dry Wgt.

Job Number: 208300

LABORATORY TEST RESULTS

Date:03/07/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATIN: Linda Korobka

Customer Sample ID: CC-WC14
 Date Sampled.....: 02/20/2002
 Time Sampled.....: 16:45
 Sample Matrix.....: Solid

Laboratory Sample ID: 208300-7
 Date Received.....: 02/21/2002
 Time Received.....: 08:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
	Trichloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	Tetrachloroethene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct
	Chlorobenzene, TCLP Leach	100	U		100	100	1.0000	ug/L	46275		02/25/02 1557	dct

* In Description = Dry Wgt.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/07/2002

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) Arizona Environmental Laboratory License number AZ0603.
- 6) According to 40CFR Part 136.3, pH, Chloride Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

U Analyte was not detected at or above the reporting limit.

< Not detected at or above the reporting limit.

J Result is less than the RL, but greater than or equal to the method detection limit.

B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.

S Result was determined by the Method of Standard Additions.

F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

^ ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, MRL: Instrument related QC exceed the upper or lower control limits.

* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.

+ MSA correlation coefficient is less than 0.995.

4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

E SD: Serial dilution exceeds the control limits.

H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.

N MS, MSD: Spike recovery exceeds the upper or lower control limits.

W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

U Analyte was not detected at or above the reporting limit.

ND Compound not detected.

J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).

Q Result was qualitatively confirmed, but not quantified.

C Pesticide identification was confirmed by GC/MS.

Y The chromatographic response resembles a typical fuel pattern.

Z The chromatographic response does not resemble a typical fuel pattern.

E Result exceeded calibration range, secondary dilution required.

F AFCEE: Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

B MB: Batch QC is greater than reporting limit.

* LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.

^ EB1, EB2, EB3, MLE: Batch QC is greater than reporting limit

A Concentration exceeds the instrument calibration range

a Concentration is below the method reporting limit

B Compound was found in the blank and sample.

D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.

H Alternate peak selection upon analytical review

I Indicates the presence of an interference, recovery is not calculated.

M Manually integrated compound.

P The lower of the two values is reported when the % difference between the results of two GC columns is greater than 25%.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/07/2002

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time
RTW	Retention Time Window Sample ID A 9 digit number unique for each sample, the first

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/07/2002

 six digits are referred as the job number
SCB Seeded Control Blank
SD Serial Dilution
UCB Unseeded Control Blank
SSV Second Source Verification Standard
SLCS Solid Laboratory Control Standard (LCS)

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCSS=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

SEVERN TRENT LABORATORIES
ANALYTICAL REPORT

JOB NUMBER: 208592

Prepared For:

Roy F. Weston, Inc.
2501 Jolly Road
Suite 100
Okemos, MI 48864-3974

Project: START-C alumet Contaminated Site

Attention: Linda K. Grobka

Date: 03/21/2002

Signature

Date

Name: Eric A. Lang
Title: Project Manager
E-Mail: elang@stl-inc.com

STL Chicago
2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX: (708) 534-5211

STL Chicago is a part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION
Date: 03/21/2002

Job Number.: 208592
Customer....: Roy F. Weston, Inc.
Attn.....: Linda Korobka

Project Number.....: 20001943
Customer: Project ID.....: START - CALUMET CONT
Project Description.....: START - Calumet Container Site

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
208592-1	CC-SS01	Soil	02/20/2002	12:10	03/12/2002	16:00
208592-2	CC-SS02	Soil	02/20/2002	12:20	03/12/2002	16:00
208592-3	CC-SS03	Soil	02/20/2002	12:40	03/12/2002	16:00

Job Number: 208592

LABORATORY TEST RESULTS

Date: 03/21/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CUMMET CNT

NTIN: Linda Korobka

Customer Sample ID: CU0801
 Date Sampled: 02/27/2002
 Time Sampled: 12:15
 Sample Matrix: Soil

Laboratory Sample ID: 208592-1
 Date Received: 03/12/2002
 Time Received: 16:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
7470A	Leachable, Mercury (CVAA) Mercury, TCLP Leach	0.0020	U		0.0020	0.0020	1	mg/L	47075		03/15/02 16:21	gpk
6010B	Leachable, Metals Analysis (ICAP)											
	Arsenic, TCLP Leach	0.100	U		0.0100	0.100	1	mg/L	47292		03/19/02 16:02	lmr
	Barium, TCLP Leach	3.93	U		0.0100	1.00	1	mg/L	47292		03/19/02 16:02	lmr
	Cadmium, TCLP Leach	4.17	U		0.0020	0.0500	1	mg/L	47292		03/19/02 16:02	lmr
	Chromium, TCLP Leach	0.0287	U		0.0100	0.0500	1	mg/L	47292		03/19/02 16:02	lmr
	Cobalt, TCLP Leach	33.3	U		0.0050	0.0500	1	mg/L	47292		03/19/02 16:02	lmr
	Selenium, TCLP Leach	0.100	U		0.0100	0.100	1	mg/L	47292		03/19/02 16:02	lmr
	Silver, TCLP Leach	0.0500	U		0.0050	0.0500	1	mg/L	47292		03/19/02 16:02	lmr

* In Description = Dry Wgt

Job Number: 208592

LABORATORY TEST RESULTS

Date: 03/21/2002

CUSTOMER: R & F. Weston, Inc.

PROJECT: START - CALUMET CONT

ATTN: Linda Korobka

Customer Sample ID: CC-SS02
 Date Sampled: 02/20/2002
 Time Sampled: 12:20
 Sample Matrix: Soil

Laboratory Sample ID: 208592-2
 Date Received: 03/12/2002
 Time Received: 16:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	CONC/RESULT	UNITS	MDL	RL	DILUTION	UNITS	BAVCH	DT	DATE/TIME	TECH
7470A	Leachable, Mercury (CWA) Mercury, TCLP Leach	0.0020		0.0020	0.0020	1	mg/L	47075		03/15/02 1623	gok
6010B	Leachable, Metals Analysis (ICAP)										
	Arsenic, TCLP Leach	0.100		0.0100	0.100	1	mg/L	47292		03/19/02 1609	lmr
	Barium, TCLP Leach	1.88		0.0100	1.00	1	mg/L	47292		03/19/02 1609	lmr
	Cadmium, TCLP Leach	0.0538		0.0020	0.0500	1	mg/L	47292		03/19/02 1609	lmr
	Chromium, TCLP Leach	0.230		0.0100	0.0500	1	mg/L	47292		03/19/02 1609	lmr
	Lead, TCLP Leach	0.130		0.0050	0.0500	1	mg/L	47292		03/19/02 1609	lmr
	Selenium, TCLP Leach	0.100		0.0100	0.100	1	mg/L	47292		03/19/02 1609	lmr
	Silver, TCLP Leach	0.0500		0.0050	0.0500	1	mg/L	47292		03/19/02 1609	lmr

* In Description = Dry Wgt

LABORATORY TEST RESULTS

Job Number: 208592

Date: 04/21/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - COLUMET CURT

ATTN: Linda Korobka

Customer Sample ID: CC-8993
 Date Sampled: 02/20/2002
 Time Sampled: 12:40
 Sample Matrix: Soil

Laboratory Sample ID: 208592-3
 Date Received: 03/12/2002
 Time Received: 16:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	NUMERICAL RESULT	Q-FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
7470A	Leachable, Mercury (CVAA) Mercury, TULF Leach	0.0020	U	0.0020	0.0020	1	mg/L	47075		03/15/02 1625	crk
6010B	Leachable, Metals Analysis (ICAP)										
	Arsenic, TULF Leach	0.100	U	0.0100	0.100	1	mg/L	47292		03/19/02 1615	lhr
	Barium, TULF Leach	1.49		0.0100	1.00	1	mg/L	47292		03/19/02 1615	lhr
	Cadmium, TULF Leach	0.0863		0.0020	0.0500	1	mg/L	47292		03/19/02 1615	lhr
	Chromium, TULF Leach	0.214		0.0100	0.0500	1	mg/L	47292		03/19/02 1615	lhr
	Copper, TULF Leach	2.54		0.0500	0.0500	1	mg/L	47292		03/19/02 1615	lhr
	Selenium, TULF Leach	0.100	U	0.0100	0.100	1	mg/L	47292		03/19/02 1615	lhr
	Silver, TULF Leach	0.0500	U	0.0050	0.0500	1	mg/L	47292		03/19/02 1615	lhr

* In Description = Dry Wgt.

LABORATORY CHRONICLE

Job Number: 208592

Date 03/21/2002

CUSTOMER: Roy F. Weston, Inc.

PROJECT: START - CALMET CUNT

ATTN: Linda Korobka

Lab ID:	Client ID:	Date Recvd:	Sample Date:			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
208592-1	CC-SS01	03/12/2002	02/20/2002			
3010A	Acid Dig. Leachates (ICAP)	1	47174	46829	03/19/2002	0945
7470A	Leachable, Mercury (CVAA)	1	47075	47073 -46829	03/15/2002	1621
6010B	Leachable, Metals Analysis (ICAP)	1	47292	47174 -46829	03/19/2002	1601
PKG MET	PKG MET (METALS)	1				
7470	SW846 Dig. Leachates (Hg)	1	47073		03/15/2002	1000
1311	TCLP Extraction	1	46829		03/13/2002	0000
208592-2	CC-SS02	03/12/2002	02/20/2002			
3010A	Acid Dig. Leachates (ICAP)	1	47174	46829	03/19/2002	0945
7470A	Leachable, Mercury (CVAA)	1	47075	47073 -46829	03/15/2002	1623
6010B	Leachable, Metals Analysis (ICAP)	1	47292	47174 -46829	03/19/2002	1609
7470	SW846 Dig. Leachates (Hg)	1	47073		03/15/2002	1000
1311	TCLP Extraction	1	46829		03/13/2002	0000
208592-3	CC-SS03	03/12/2002	02/20/2002			
3010A	Acid Dig. Leachates (ICAP)	1	47174	46829	03/19/2002	0945
7470A	Leachable, Mercury (CVAA)	1	47075	47073 -46829	03/15/2002	1625
6010B	Leachable, Metals Analysis (ICAP)	1	47292	47174 -46829	03/19/2002	1615
7470	SW846 Dig. Leachates (Hg)	1	47073		03/15/2002	1000
1311	TCLP Extraction	1	46829		03/13/2002	0000

QUALITY ASSURANCE METHODS
REFERENCES AND NOTES

Report Date: 03/27/2002

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal, or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAP, Lab Cert. ID# 100201
- 5) Arizona Environmental Laboratory, License number AZ0603.
- 6) According to 40CFR Part 136.3, pH, Chloride Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH field), they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report):

- Inorganic Qualifiers (Q-Column)
- U Analyte was not detected at or above the reporting limit.
 - < Not detected at or above the reporting limit.
 - > Result is less than the RL, but greater than or equal to the method detection limit.
 - B Result is less than the RDL/RL, but greater than or equal to the IDL/MDL.
 - S Result was determined by the Method of Standard Additions.
 - APCEB: Result is less than the RL, but greater than or equal to the method detection limit.
- Inorganic Flags (Flag Column)
- ICV, CV, ICB, CCB, SA, SE, CRT, CRA, NPL: Instrument related QC exceed the upper or lower control limits
 - LCS, LCL, NDL: Batch QC exceeds the upper or lower control limits
 - MSA: correlation coefficient is less than 0.995.
 - MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
 - SD: Serial dilution exceeds the control limits.
 - H, M, EB1, EB2, EB3: Batch QC is greater than reporting limit or lower control limit; the instrument reading lower than the absolute value of the reporting limit.
 - N, NDL: Spike recovery exceeds the upper or lower control limits
 - K, AS(GFM): Post-digestion spike was outside 65-115% control limits
- Organic Qualifiers (Q - Column)
- U Analyte was not detected at or above the reporting limit.
 - ND Compound not detected.
 - < Result is an estimated value below the reporting limit or a tentatively identified compound.
 - C Result was qualitatively confirmed, but not quantified
 - O Pesticide identification was confirmed by GC/MS.
 - Y the chromatographic response resembles a typical fuel pattern.
 - Z The chromatographic response does not resemble a typical fuel pattern.
 - E Result exceeded calibration range, secondary dilution required.
 - F APCEB: Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)
- Organic Flags (Flag Column)
- B, M6: Batch QC is greater than reporting limit.
 - LCS, LCL, ELD, CV, NS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
 - EB1, EB2, EB3, MLE: Batch QC is greater than reporting limit
 - A Concentration exceeds the instrument calibration range
 - a Concentration is below the method Reporting Limit (RL)
 - B Compound was found in the blank and sample.
 - D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
 - H Alternate peak present in fuel analysis pattern
 - I Indicates the presence of an interference; recovery is not calculated.
 - M Manually identified compound
 - F The lower of the two values is reported when the % difference between the results of two QC columns is

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greater than 25%.

Abbreviations

AS Post Digestion Spike (GFAA Samples - See Note 1 below.)
 Batch Designation given to identify a specific extraction, digestion, preparation set, or analysis set
 CAP Capillary Column CCB Continuing Calibration Blank
 CCV Continuing Calibration Verification
 CF Confirmation analysis of original
 C1 Confirmation analysis of A1 or D1
 C2 Confirmation analysis of A2 or D2
 C3 Confirmation analysis of A3 or D3
 CRA Low Level Standard Check - GFAA; Mercury
 CRI Low Level Standard Check - ICP
 CV Calibration Verification Standard
 Dil Fac Dilution Factor - Secondary dilution analysis
 D1 Dilution 1
 D2 Dilution 2
 D3 Dilution 3
 DLFac Detection Limit Factor
 DSH Distilled Standard - High Level
 DSL Distilled Standard - Low Level
 DSM Distilled Standard - Medium Level
 EB1 Extraction Blank 1
 EB2 Extraction Blank 2
 EB3 DI Blank
 ELC Method Extracted LCF
 ELD Method Extracted LCF
 ICAL Initial calibration
 ICB Initial Calibration Blank
 ICV Initial Calibration Verification
 IDL Instrument Detection Limit
 ISA Interference Check Sample A - ICP
 ISB Interference Check Sample B - ICP
 Job No. The first six digits of the sample ID which refers to a specific client, project and sample group
 Lab ID An 8 number unique laboratory identification
 LCD Laboratory Control Standard Duplicate
 LCS Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
 MB Method Blank or PB Preparation Blank
 MD Method Duplicate
 MDL Method Detection Limit
 MLE Medium Level Extraction Blank
 MRL Method Reporting Limit Standard
 MSA Method of Standard Additions
 MS Matrix Spike
 MSD Matrix Spike Duplicate
 ND Not Detected
 PREPF Preparation factor used by the Laboratory's Information Management System (LIMS)
 PDS Post Digestion Spike (ICAP)
 RA Re-analysis of original
 A1 Re-analysis of D1
 A2 Re-analysis of D2
 A3 Re-analysis of D3
 RD Re-extraction of dilution
 RE Re-extraction of original
 RC Re-extraction Confirmation
 RL Reporting Limit
 RPD Relative Percent Difference of duplicate (unrounded) analyses
 RRF Relative Response Factor
 RT Retention Time

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RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number

SCB Seeded Control Blank

SD Serial Dilution

UCB Unseeded Control Blank

SSV Second Source Verification Standard

S LCS Solid Laboratory Control Standard/LCS

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCSS=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)